

jc584 U.S. PTO
09/450969
11/29/99

1045 1050 1055
 Leu Met His Thr Val Met Gln His Leu Pro Phe Arg Glu Gln Arg Leu
 1060 1065 1070
 Thr Lys Asp Glu
 1075

<210> 5849
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 5849
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 1 5 10 15
 Lys Pro Leu Lys Ile Tyr Ser Glu Tyr Asp Tyr Cys Gly His Phe Ile
 20 25 30
 Leu Leu Tyr Tyr Gln Val Leu Lys Met Leu Asn Tyr
 35 40

<210> 5850
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 <212> PRT
 <213> S.epidermidis

<400> 5850
 Phe Arg Arg Val Tyr Met Thr Lys Tyr Val Leu Lys Arg Leu Cys Tyr
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 Met Phe Val Ser Leu Phe Ile Val Ile Thr Ile Thr Phe Phe Leu Met
 20 25 30
 Lys Leu Met Pro Gly Ser Pro Phe Asn Asp Thr Lys Leu Asn Ala Gln
 35 40 45
 Gln Lys Glu Ile Leu Asn Glu Lys Tyr Gly Leu Asn Asp Pro Val Ala
 50 55 60
 Leu Gln Tyr Val Asn Tyr Leu Lys Asn Val Val Thr Gly Asp Phe Gly
 65 70 75 80
 Asn Ser Phe Gln Tyr His Asn Met Pro Val Trp Asp Leu Val Lys Pro
 85 90 95
 Arg Leu Ile Pro Ser Met Glu Met Gly Ile Thr Ala Met Val Ile Gly
 100 105 110
 Val Val Leu Gly Leu Val Leu Gly Val Ala Ala Ala Thr Lys Gln Asn
 115 120 125
 Thr Trp Val Asp Tyr Thr Thr Thr Ile Ile Ser Val Ile Ala Val Ser
 130 135 140
 Val Pro Ser Phe Val Leu Ala Val Leu Leu Gln Tyr Val Phe Ala Val
 145 150 155 160
 Lys Leu Glu Trp Phe Pro Val Ala Gly Trp Glu Gly Phe Ser Thr Ala
 165 170 175
 Ile Leu Pro Ser Leu Ala Leu Ser Ala Thr Val Leu Ala Thr Val Ala
 180 185 190
 Arg Tyr Ile Arg Ala Glu Met Ile Glu Val Leu Ser Ser Asp Tyr Ile
 195 200 205
 Leu Leu Ala Arg Ala Lys Gly Asn Ser Thr Leu Lys Val Leu Phe Gly
 210 215 220
 His Ala Leu Arg Asn Ala Leu Ile Pro Ile Ile Thr Ile Ile Val Pro
 225 230 235 240
 Met Leu Ala Gly Ile Leu Thr Gly Thr Leu Thr Ile Glu Asn Ile Phe

2503

				245					250					255			
Gly	Val	Pro	Gly	Leu	Gly	Asp	Gln	Phe	Val	Arg	Ser	Ile	Thr	Thr	Asn		
			260					265					270				
Asp	Phe	Ser	Val	Ile	Met	Ala	Thr	Thr	Ile	Leu	Phe	Ser	Thr	Leu	Phe		
		275					280					285					
Ile	Val	Ser	Ile	Phe	Ile	Val	Asp	Ile	Leu	Tyr	Gly	Val	Ile	Asp	Pro		
	290					295					300						
Arg	Ile	Arg	Val	Gln	Gly	Gly	Lys	Lys									
305					310												

<210> 5851

<211> 618

<212> PRT

<213> S.epidermidis

<400> 5851

Arg	Asn	Leu	Leu	Leu	Ile	Gly	Lys	Asn	Val	Thr	Met	Arg	Lys	Lys	Leu		
1				5					10					15			
Asn	Asn	Glu	Tyr	Arg	Ser	Ala	Lys	Lys	Ile	Arg	Tyr	Met	Pro	Gly	Leu		
		20						25					30				
Asp	Gly	Leu	Arg	Ala	Ile	Ala	Val	Ile	Gly	Ile	Ile	Ile	Tyr	His	Leu		
		35					40					45					
Asn	Lys	Gln	Trp	Leu	Thr	Gly	Gly	Phe	Leu	Gly	Val	Asp	Thr	Phe	Phe		
	50					55					60						
Val	Ile	Ser	Gly	Tyr	Leu	Ile	Thr	Ser	Leu	Leu	Leu	Lys	Glu	Tyr	Glu		
	65				70					75					80		
Asp	Thr	Gly	Thr	Ile	Asn	Leu	Lys	Asn	Phe	Trp	Ile	Arg	Arg	Ile	Lys		
			85					90						95			
Arg	Leu	Leu	Pro	Ala	Val	Phe	Ala	Leu	Ile	Val	Val	Val	Gly	Ile	Ala		
			100					105						110			
Thr	Leu	Leu	Leu	His	Pro	Glu	His	Ile	Val	Arg	Val	Lys	His	Asp	Met		
		115					120					125					
Ile	Ala	Ala	Ile	Phe	Tyr	Val	Ser	Asn	Trp	Trp	Tyr	Ile	Ala	Lys	Asp		
	130					135					140						
Val	Asn	Tyr	Phe	Glu	Gln	Phe	Ser	Phe	Met	Pro	Leu	Lys	His	Leu	Trp		
					150				155						160		
Ser	Leu	Ala	Ile	Glu	Glu	Gln	Phe	Tyr	Leu	Phe	Phe	Pro	Ala	Val	Leu		
				165					170					175			
Leu	Leu	Phe	Met	Ala	Ile	Val	Lys	Lys	Lys	Lys	Asn	Val	Ile	Leu	Met		
		180						185					190				
Phe	Trp	Ile	Ile	Ser	Leu	Val	Ser	Leu	Leu	Met	Met	Val	Val	Ile	Ser		
		195					200					205					
Gln	Pro	His	Leu	Asn	His	Ser	Arg	Val	Tyr	Phe	Gly	Thr	Asp	Thr	Arg		
	210					215					220						
Leu	Gln	Thr	Leu	Leu	Leu	Gly	Val	Leu	Leu	Ala	Phe	Ile	Trp	Pro	Pro		
	225				230					235					240		
Phe	Lys	Leu	Asn	Pro	Asn	Pro	Pro	Lys	Gly	Leu	Lys	Thr	Val	Ile	Asn		
			245						250					255			
Ser	Ala	Gly	Ile	Gly	Leu	Thr	Phe	Val	Ile	Leu	Leu	Phe	Phe	Asn			
		260					265					270					
Val	Ser	Asp	Glu	Ser	Asp	Trp	Ile	Tyr	Asn	Gly	Gly	Phe	Tyr	Leu	Ile		
		275					280					285					
Ser	Thr	Met	Thr	Leu	Leu	Ile	Ile	Ala	Ser	Val	Val	His	Pro	Thr	Thr		
		290				295					300						
Ile	Leu	Ala	Lys	Leu	Leu	Gly	Asn	Pro	Leu	Phe	Val	Tyr	Ile	Gly	Lys		
305					310					315					320		

Sequence = 5851

<213> S.epidermidis

Glu	Val	Ser	Leu	Met	Ser	Ile	Asn	Ser	Tyr	Leu	Ile	Ser	Ser	Leu	Phe
1				5					10					15	
Thr	Pro	Val	Leu	Ser	Ile	Ile	Ile	Trp	Leu	Phe	Tyr	Ser	Asn	His	Phe
			20					25					30		
Ile	Asn	Leu	Ile	Asn	Ile	Leu	Phe	Tyr	Thr	Ser	Phe	Ile	Ile	Phe	Ile
			35				40						45		
Val	Ala	Phe	Leu	Ile	Leu	Leu	Ile	Gln	Glu	Gly	Ile	Phe	Asp	Ala	Thr
			50			55					60				
Ser	Phe	Gly	Phe	Arg	Arg	Leu	Lys	Tyr	Gln	Leu	Ser	Ser	Thr	Lys	Arg
65				70						75				80	
Lys	Arg	Met	Met	Lys	Asn	Asp	His	Phe	Phe	Asn	Pro	Gln	Lys	Val	Lys
				85					90					95	
Lys	Glu	Ser	Tyr	Ile	Ile	Ser	Pro	Trp	Val	Val	Pro	Thr	Leu	Ile	Ile
			100					105					110		
Asn	Leu	Thr	Tyr	Ile	Ile	Val	Ser	Ile	Gly	Val	Ser	Leu	Leu	Ile	
			115				120					125			

<211> 395

<213> S.epidermidis

Gln 1	Met	Lys	Leu	Ser 5	Leu	Asn	Ser	Ser	Ser 10	Lys	Phe	Leu	Arg	Ala 15	Pro
Ser	Ile	Arg	Gln 20	Phe	Ser	Asn	Arg	Ile 25	Lys	Ala	Ile	Asp 30	Asp	Cys	Val
Asn	Leu	Thr 35	Ile	Gly	Gln	Pro	Asp 40	Phe	Pro	Met	Pro	Asp 45	Val	Val	Lys
Asn 50	Ala	Tyr	Ile	Lys	Ala	Ile 55	Lys	Asn	Asp	Lys	Thr 60	Ser	Tyr	Ser	His
Asn 65	Lys	Gly	Leu	Phe	Glu 70	Thr	Arg	Glu	Ala	Ile 75	Ser	Gln	Tyr	Phe	Lys
Arg	Lys	Tyr	Asn 85	Phe	Leu	Tyr	Ser	Glu 90	Glu	Glu	Ile	Ile	Val	Thr	Asn
Gly	Ala	Ser 100	Glu	Ala	Leu	Asp	Thr 105	Ser	Leu	Arg	Ser	Ile 110	Ile	Glu	Pro
Gly	Asp	Asp 115	Ile	Leu	Ile	Pro	Gly 120	Pro	Ile	Tyr	Ala	Gly 125	Tyr	Ile	Pro
Leu 130	Val	Glu	Thr	Leu	Gly	Gly 135	Asn	Pro	Val	Tyr	Ile 140	Asp	Thr	Thr	Gln
Ser 145	Asp	Phe	Lys	Val	Thr 150	Pro	Glu	Leu	Ile	Glu 155	Ser	His	Leu	Thr	His
Lys	Thr	Lys	Ala 165	Ile	Leu	Leu	Asn	Tyr 170	Pro	Thr	Asn	Pro	Thr	Gly 175	Val
Ile	Leu	Glu	Arg 180	Ser	Glu	Val	Lys 185	Asn	Ile	Val	Asp	Thr 190	Leu	Val	Asn
Lys	His	Ile 195	Phe	Ile	Ile	Ser	Asp 200	Glu	Ile	Tyr	Ala 205	Glu	Asn	Thr	Phe
Lys 210	Gly	Gln	His	Thr	Ser	Phe 215	Ala	Glu	Phe	Pro	Glu 220	Ile	Arg	Asp	Gln
Leu	Leu	Leu	Ile	Gly	Gly	Leu	Ser	Lys	Ser	His	Ser	Ala	Thr	Gly	Ile

		20						25					30		
His	Thr	Thr	Thr	Leu	Asp	Ile	Gln	Phe	Thr	Glu	Ile	Leu	Lys	Tyr	Ile
		35					40					45			

<210> 5857

<211> 888

<212> PRT

<213> S.epidermidis

<400> 5857

Asp	Gly	Cys	Ser	Phe	Tyr	Phe	Leu	Gly	Gly	Arg	His	Met	Glu	Met	Lys
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Pro	Lys	Tyr	Asp	Pro	Arg	Glu	Val	Glu	Lys	Gly	Arg	Tyr	Glu	Glu	Trp
		20					25					30			
Val	Ser	Asn	Gly	Tyr	Phe	Lys	Pro	Ser	Glu	Asp	Lys	Ser	Lys	Glu	Ala
		35					40					45			
Tyr	Thr	Ile	Val	Ile	Pro	Pro	Pro	Asn	Val	Thr	Gly	Lys	Leu	His	Leu
	50				55					60					
Gly	His	Ala	Trp	Asp	Thr	Thr	Leu	Gln	Asp	Ile	Ile	Thr	Arg	Met	Lys
65				70					75					80	
Arg	Met	Gln	Gly	Tyr	Asp	Thr	Leu	Tyr	Leu	Pro	Gly	Met	Asp	His	Ala
			85					90					95		
Gly	Ile	Ala	Thr	Gln	Ala	Lys	Val	Glu	Ala	Lys	Leu	Asn	Glu	Gln	Gly
			100					105					110		
Ile	Ser	Arg	His	Asp	Leu	Gly	Arg	Glu	Lys	Phe	Leu	Gln	Gln	Ala	Trp
		115					120					125			
Asp	Trp	Lys	Glu	Glu	Tyr	Ala	Thr	Phe	Ile	Arg	Gln	Gln	Trp	Ala	Lys
	130					135				140					
Leu	Gly	Leu	Gly	Leu	Asp	Tyr	Ser	Arg	Glu	Arg	Phe	Thr	Leu	Asp	Asp
145				150					155					160	
Gly	Leu	Ser	Lys	Ala	Val	Arg	Lys	Val	Phe	Val	Asp	Leu	Tyr	Asn	Lys
			165					170						175	
Gly	Ile	Ile	Tyr	Arg	Gly	Glu	Arg	Ile	Ile	Asn	Trp	Asp	Pro	Ile	Ala
			180					185					190		
Arg	Thr	Ala	Leu	Ser	Asp	Ile	Glu	Val	Ile	His	Glu	Asp	Val	Gln	Gly
		195					200					205			
Ala	Phe	Tyr	His	Phe	Lys	Tyr	Pro	Tyr	Gly	Asp	Gly	Asn	Gly	Tyr	Ile
	210					215					220				
Glu	Ile	Ala	Thr	Thr	Arg	Pro	Glu	Thr	Met	Leu	Gly	Asp	Thr	Ala	Ile
225					230					235				240	
Val	Val	Asn	Pro	Asn	Asp	Glu	Arg	Tyr	Lys	Asp	Val	Ile	Gly	Lys	Thr
			245						250					255	
Val	Ile	Leu	Pro	Ile	Val	Gly	Arg	Glu	Leu	Pro	Ile	Leu	Ala	Asp	Glu
		260						265					270		
Tyr	Val	Asp	Ile	Glu	Phe	Gly	Ser	Gly	Ala	Met	Lys	Val	Thr	Pro	Ala
		275					280					285			
His	Asp	Pro	Asn	Asp	Phe	Glu	Ile	Gly	Gln	Arg	His	Gln	Leu	Glu	Asn
	290					295					300				
Ile	Ile	Val	Met	Asp	Glu	Tyr	Gly	Lys	Met	Asn	Asp	Lys	Ala	Asp	Lys
305				310					315					320	
Tyr	Lys	Gly	Met	Asp	Arg	Phe	Asp	Cys	Arg	Asn	Gln	Leu	Val	Lys	Asp
			325						330					335	
Leu	Lys	Glu	Gln	Asp	Leu	Val	Ile	Lys	Ile	Glu	Glu	His	Thr	His	Ser
			340					345					350		
Val	Gly	His	Ser	Glu	Arg	Ser	Gly	Ala	Ile	Val	Glu	Pro	Tyr	Leu	Ser
		355					360					365			

Thr	Gln	Trp	Phe	Val	Lys	Met	Lys	Pro	Leu	Ala	Gln	Arg	Ala	Leu	Asp
370						375					380				
Asn	Gln	Asn	Thr	Lys	Asp	Arg	Ile	Asp	Phe	Phe	Pro	Gly	Arg	Phe	Glu
385					390					395					400
Asn	Thr	Phe	Asn	Arg	Trp	Met	Glu	Glu	Ile	Arg	Asp	Trp	Thr	Ile	Ser
				405					410					415	
Arg	Gln	Leu	Trp	Trp	Gly	His	Gln	Ile	Pro	Ala	Trp	Tyr	His	Lys	Asp
			420					425					430		
Thr	Gly	Glu	Val	Phe	Val	Gly	Glu	Glu	Ala	Pro	Glu	Asp	Ile	Glu	Asn
		435					440					445			
Trp	Ile	Gln	Asp	Glu	Asp	Val	Leu	Asp	Thr	Trp	Phe	Ser	Ser	Ala	Leu
	450					455					460				
Trp	Pro	Phe	Ser	Thr	Leu	Gly	Trp	Pro	Asp	Thr	Asn	Ala	Asp	Asp	Phe
465					470					475					480
Lys	Arg	Tyr	Tyr	Pro	Thr	Asn	Ala	Leu	Val	Thr	Gly	Tyr	Asp	Ile	Ile
				485					490					495	
Phe	Phe	Trp	Val	Ala	Arg	Met	Ile	Phe	Gln	Gly	Leu	Glu	Phe	Thr	Asp
			500					505					510		
Arg	Arg	Pro	Phe	Asn	Asp	Val	Leu	Leu	His	Gly	Leu	Val	Arg	Ala	Glu
		515					520					525			
Asp	Gly	Arg	Lys	Met	Ser	Lys	Ser	Leu	Gly	Asn	Gly	Val	Asp	Pro	Met
	530					535					540				
Asp	Val	Ile	Asp	Glu	Tyr	Gly	Ala	Asp	Ser	Leu	Arg	Tyr	Phe	Leu	Ala
545					550					555					560
Thr	Gly	Ser	Ser	Pro	Gly	His	Asp	Leu	Arg	Tyr	Ser	Thr	Glu	Lys	Val
				565				570						575	
Glu	Ser	Val	Trp	Asn	Phe	Ile	Asn	Lys	Ile	Trp	Asn	Ala	Ala	Arg	Phe
			580					585					590		
Ser	Leu	Met	Asn	Ile	Gly	Glu	Asp	Phe	Lys	Val	Glu	Asp	Ile	Asp	Leu
		595					600					605			
Ser	Gly	Asn	Leu	Ser	Leu	Ala	Asp	Gln	Trp	Ile	Leu	Thr	Arg	Leu	Asn
	610					615					620				
Glu	Thr	Ile	Ser	Thr	Val	Thr	Glu	Leu	Ser	Asp	Lys	Tyr	Glu	Phe	Gly
625					630					635					640
Glu	Val	Gly	Arg	Ala	Leu	Tyr	Asn	Phe	Ile	Trp	Asp	Glu	Phe	Cys	Asp
				645					650					655	
Trp	Tyr	Ile	Glu	Met	Ser	Lys	Ile	Pro	Met	Asn	Gly	Glu	Asp	Glu	Ser
			660					665					670		
Gln	Lys	Gln	Thr	Thr	Arg	Ser	Val	Leu	Ser	Tyr	Val	Leu	Asp	Lys	Ile
			675				680					685			
Met	Lys	Met	Leu	His	Pro	Phe	Met	Pro	Phe	Val	Thr	Glu	Thr	Ile	Trp
	690					695					700				
Gln	Ser	Leu	Pro	His	His	Gly	Glu	Thr	Ile	Val	Lys	Ala	Asn	Trp	Pro
705					710					715					720
Thr	Val	Asp	Gln	Ala	Leu	Ile	Phe	Asn	Glu	Ser	Lys	Gln	Thr	Met	Glu
				725					730					735	
Gln	Leu	Val	Glu	Ile	Ile	Lys	Ser	Val	Arg	Gln	Ser	Arg	Val	Glu	Val
			740					745					750		
Asn	Thr	Pro	Leu	Ser	Lys	Ala	Ile	Pro	Ile	Leu	Ile	Gln	Thr	Lys	Asp
		755					760					765			
Glu	Lys	Ile	Lys	His	Thr	Leu	Met	Asp	Asn	Ile	Ser	Tyr	Leu	His	Lys
	770					775					780				
Phe	Cys	Asn	Pro	Ser	Gln	Leu	Thr	Ile	Asp	Thr	Glu	Ile	Glu	Ile	Pro
785					790					795					800
Glu	Lys	Ala	Met	Thr	Thr	Val	Val	Val	Ala	Gly	Lys	Val	Val	Leu	Pro
				805					810					815	

Leu Glu Gly Leu Ile Asp Met Asp Lys Glu Ile Ala Arg Leu Glu Lys
 820 825 830
 Glu Leu Asp Lys Leu Gln Ser Glu Leu Asp Arg Val Asp Lys Lys Leu
 835 840 845
 Ser Asn Glu Asn Phe Val Asn Lys Ala Pro Glu Lys Ile Ile Asn Glu
 850 855 860
 Glu Lys Glu Lys Gln Gln His Tyr Gln Glu Lys Tyr Asn Gly Val Lys
 865 870 875 880
 Ser Arg Ile Glu Gln Leu Lys Ala
 885

<210> 5858

<211> 442

<212> PRT

<213> S.epidermidis

<400> 5858

Ile Ser Gln Ser Trp Arg Tyr Leu Tyr Met Thr Ala Thr Trp Glu Lys
 1 5 10 15
 Lys Glu Gly Asn Glu Gly Val Leu Thr Val Thr Val Pro Ala Glu Lys
 20 25 30
 Val Asn Lys Ala Leu Asp Gln Ala Phe Lys Lys Val Val Lys Gln Ile
 35 40 45
 Asn Val Pro Gly Phe Arg Lys Gly Lys Val Pro Arg Pro Ile Phe Glu
 50 55 60
 Gln Arg Phe Gly Val Glu Ala Leu Tyr Gln Asp Ala Val Asp Ile Leu
 65 70 75 80
 Leu Pro Glu Ala Tyr Gly Glu Ala Ile Glu Asp Thr Glu Ile Asn Pro
 85 90 95
 Val Ala Gln Pro Glu Val Asn Val Thr Gln Ile Glu Lys Gly Lys Asp
 100 105 110
 Phe Ile Phe Glu Ala Thr Val Thr Val Glu Pro Glu Val Lys Leu Gly
 115 120 125
 Asp Tyr Lys Gly Leu Glu Ile Glu Lys Gln Glu Thr Asp Leu Ser Asp
 130 135 140
 Glu Glu Leu Gln Glu Ser Ile Asp His Ser Leu Ser His Leu Ala Glu
 145 150 155 160
 Met Val Val Lys Glu Asp Gly Ala Val Glu Asn Gly Asp Thr Val Asn
 165 170 175
 Ile Asp Phe Ser Gly Ser Val Asp Gly Glu Glu Phe Asp Gly Gly Gln
 180 185 190
 Ala Glu Gly Tyr Asp Leu Glu Ile Gly Ser Gly Ser Phe Ile Pro Gly
 195 200 205
 Phe Glu Glu Gln Ile Glu Gly Met Lys Thr Gly Asp Glu Lys Asp Val
 210 215 220
 Val Val Thr Phe Pro Glu Tyr His Ala Glu Leu Ala Gly Lys
 225 230 235 240
 Glu Ala Thr Phe Lys Thr Lys Val Asn Glu Ile Lys Phe Lys Asp Val
 245 250 255
 Pro Glu Leu Asn Asp Glu Ile Ala Asn Glu Leu Asp Ser Asp Ala Glu
 260 265 270
 Asn Val Asp Glu Tyr Lys Glu Asn Leu Arg Lys Arg Leu Ser Glu Gln
 275 280 285
 Lys Ala Thr Glu Ala Glu Asn Thr Glu Lys Glu Glu Ala Ile Asn Lys
 290 295 300
 Ala Thr Glu Asn Ala Ser Ile Asp Ile Pro Glu Ala Met Ile Asn Thr

305 310 315 320
 Glu Leu Asp Arg Met Ile Gln Glu Phe Gly Gln Arg Ile Gln Gln Gln
 325 330 335
 Gly Leu Asp Leu Gln Thr Tyr Tyr Gln Ile Ser Gly Gln Asn Glu Glu
 340 345 350
 Gln Leu Arg Asp Gln Met Lys Asp Asp Ala Glu Gln Arg Val Lys Thr
 355 360 365
 Asn Leu Thr Leu Thr Ala Ile Ala Asp Glu Glu Asn Ile Glu Val Ser
 370 375 380
 Asp Glu Asp Ile Asp Lys Glu Leu Glu Lys Met Ser Glu Gln Phe Asn
 385 390 395 400
 Ile Ser Val Glu Asp Ile Lys Ser Thr Leu Gly Asn Thr Asp Ile Val
 405 410 415
 Lys Asn Asp Val Arg Ile Gln Lys Val Ile Asp Leu Leu Arg Asp Asn
 420 425 430
 Ala Lys Tyr Val Glu Ala Thr Lys Glu Asp
 435 440

<210> 5859

<211> 57

<212> PRT

<213> S.epidermidis

<400> 5859

Phe His Cys Pro Ala Pro Lys Phe His Leu Thr Ser Thr Ile Ile Asn
 1 5 10 15
 His Asn Asp Ala Ile Leu Ser Cys Gln Ser Ile Gln Leu Thr Leu Ser
 20 25 30
 Ile Phe Asn Leu Thr Tyr Arg Gln Leu Thr Asn Ser Ile Leu Cys Ile
 35 40 45
 His Leu Met Asn Asp Thr Ser Leu Leu
 50 55

<210> 5860

<211> 422

<212> PRT

<213> S.epidermidis

<400> 5860

Lys Arg Met Phe Lys Phe Asn Glu Asp Glu Glu Asn Leu Lys Cys Ser
 1 5 10 15
 Phe Cys Gly Lys Asp Gln Asp Gln Val Lys Lys Leu Val Ala Gly Ser
 20 25 30
 Gly Val Tyr Ile Cys Asn Glu Cys Ile Glu Leu Cys Ser Glu Ile Val
 35 40 45
 Glu Glu Glu Leu Ala Gln Asn Thr Ser Glu Gly Phe Thr Glu Leu Pro
 50 55 60
 Thr Pro Lys Glu Ile Met Asp His Leu Asn Glu Tyr Val Ile Gly Gln
 65 70 75 80
 Glu Lys Ala Lys Lys Ser Leu Ala Val Ala Val Tyr Asn His Tyr Lys
 85 90 95
 Arg Ile Gln Gln Leu Gly Pro Asn Glu Asp Asp Val Glu Leu Gln Lys
 100 105 110
 Ser Asn Ile Ala Leu Ile Gly Pro Thr Gly Ser Gly Lys Thr Leu Leu
 115 120 125
 Ala Gln Thr Leu Ala Lys Thr Leu Asn Val Pro Phe Ala Ile Ala Asp

130 135 140
 Ala Thr Ser Leu Thr Glu Ala Gly Tyr Val Gly Asp Asp Val Glu Asn
 145 150 155 160
 Ile Leu Leu Arg Leu Ile Gln Ala Ala Asp Phe Asp Ile Asp Lys Ala
 165 170 175
 Glu Lys Gly Ile Ile Tyr Val Asp Glu Ile Asp Lys Ile Ala Arg Lys
 180 185 190
 Ser Glu Asn Thr Ser Ile Thr Arg Asp Val Ser Gly Glu Gly Val Gln
 195 200 205
 Gln Ala Leu Leu Lys Ile Leu Glu Gly Thr Thr Ala Ser Val Pro Pro
 210 215 220
 Gln Gly Gly Arg Lys His Pro Asn Gln Glu Leu Ile Gln Ile Asp Thr
 225 230 235 240
 Thr Asn Ile Leu Phe Ile Leu Gly Gly Ala Phe Asp Gly Ile Asp Glu
 245 250 255
 Val Ile Lys Arg Arg Leu Gly Glu Lys Val Ile Gly Phe Ala Ser Asn
 260 265 270
 Glu Ala Asp Lys Tyr Asp Glu Glu Ala Leu Leu Glu Gln Ile Arg Pro
 275 280 285
 Glu Asp Leu Gln Ser Tyr Gly Leu Ile Pro Glu Phe Ile Gly Arg Val
 290 295 300
 Pro Ile Val Ala Asn Leu Glu Thr Leu Asp Val Ala Ala Leu Lys Asn
 305 310 315 320
 Ile Leu Thr Gln Pro Lys Asn Ala Leu Val Lys Gln Tyr Thr Lys Met
 325 330 335
 Leu Glu Leu Asp Asn Val Glu Leu Glu Phe Ser Glu Glu Ala Leu Ser
 340 345 350
 Ala Ile Ser Glu Lys Ala Ile Glu Arg Lys Thr Gly Ala Arg Gly Leu
 355 360 365
 Arg Ser Ile Ile Glu Glu Ala Leu Ile Asp Ile Met Tyr Asp Val Pro
 370 375 380
 Ser Ser Glu Asn Val Ser Lys Val Val Ile Thr Glu Gln Thr Ile Asn
 385 390 395 400
 Glu Glu Ile Glu Pro Glu Leu Tyr Asp Asp Glu Gly Asn Leu Ile Asn
 405 410 415
 Lys Asn Lys Thr Ser Ala
 420

<210> 5861

<211> 40

<212> PRT

<213> S.epidermidis

<400> 5861

Leu Ile Arg Thr Arg His Leu Leu Lys Ile Phe Asp Leu Arg Leu Ser
 1 5 10 15
 His Val Asn Cys Asp Ser Val Phe Leu Tyr Val Asn Ile Glu Lys Asn
 20 25 30
 Val Lys Val Val Asn Tyr Thr Ile Val
 35 40

<210> 5862

<211> 46

<212> PRT

<213> S.epidermidis

<400> 5862

Ile Lys Asn Ala Leu Ile Ser Thr Phe Lys Ala Met Leu Cys His Gln
 1 5 10 15
 Tyr Ser Lys Phe His Leu Glu Ile Gln Gln Thr Arg Arg Val Gly Val
 20 25 30
 Trp Gly Pro Asn Lys Lys Asn Phe Thr Glu Lys Phe Asn Arg
 35 40 45

<210> 5863

<211> 48

<212> PRT

<213> S.epidermidis

<400> 5863

Phe Lys Met Ala Glu Gln Ser Lys Glu Lys Gln Ala Asn Glu Gln Ala
 1 5 10 15
 Lys Ala Gln Asn Leu Phe Ala Arg Trp Arg Lys Glu Glu Thr Leu Tyr
 20 25 30
 Ser Glu Asp Glu Lys Lys Asp Lys Ser Ser Lys Lys Lys Asp Lys Glu
 35 40 45

<210> 5864

<211> 192

<212> PRT

<213> S.epidermidis

<400> 5864

Asp Thr Asn Phe Ser His Ile Glu Val Phe Trp Val Leu Lys Phe Phe
 1 5 10 15
 Arg Asn Asn Lys Leu Ile Val Val Leu Cys Ala Met Ile Ile Phe Ile
 20 25 30
 Ala Leu Ile Gly Leu Ser Ile Arg Ser Gln Thr Gln Ser Pro Ala Glu
 35 40 45
 Gln Tyr Val Gly Asp Ser Val Ser Phe Gly Gln Arg Val Ile Ser Tyr
 50 55 60
 Pro Ile Gln Phe Val Thr Gly Ser Ile Gly Asp Leu Phe Glu Lys Gly
 65 70 75 80
 Ser Ser Lys Lys Asp Lys Asn Lys Ile Lys Gln Leu Glu Ala Lys Asn
 85 90 95
 Glu Glu Leu Glu Ser Glu Asn Lys Lys Tyr Lys Lys Glu Leu Asp Ile
 100 105 110
 Lys Asp Leu Ser Lys Tyr Glu Pro Ile Ser Thr Ser Val Ile Ala Arg
 115 120 125
 Asn Pro Asp Gln Trp Met Asn Thr Ile Leu Ile Asp Lys Gly Ser Lys
 130 135 140
 Ala Gly Ile Lys Asn Asn Met Ala Val Met Thr Thr Arg Arg Ile Ser
 145 150 155 160
 Trp Lys Ser Thr Lys Val Asn His Phe His Pro Ser Arg Pro Tyr Phe
 165 170 175
 His Ser Tyr Ser Ser Arg Lys Ile Phe Val Asn Ile His His Arg Thr
 180 185 190

<210> 5865

<211> 107

<212> PRT

<213> S.epidermidis

<400> 5865

Ser Asn His Tyr Leu Pro Ile Pro His Asn Asp Pro Phe Gln Leu Leu
 1 5 10 15
 Leu Asp His Ile Leu Val Ser Phe Pro Tyr Val Tyr Leu Leu Lys Asn
 20 25 30
 Lys Lys Asn Ile His Pro Ile Lys Asn Arg Thr Asp Val Leu Phe Arg
 35 40 45
 Gly Thr Thr Tyr Ile Gln Glu Ile Ile His Ser Phe Leu Gln Ala
 50 55 60
 Leu Lys Ser Leu Ile Asn Ala His Thr Arg Leu Leu Pro Thr Cys Arg
 65 70 75 80
 Leu Cys Phe Asn Arg Ser Tyr Lys Ile Gly Leu Pro Ser Asp Leu Ile
 85 90 95
 Ile Tyr Ile Phe Thr Ala Thr Ile Cys Ser Leu
 100 105

<210> 5866

<211> 73

<212> PRT

<213> S.epidermidis

<400> 5866

Tyr Tyr Ile Tyr Asn Ile Ser Asp Leu Arg Arg Phe Asn Ile Met Ser
 1 5 10 15
 Ile Leu Thr Ile Ile Leu Ile Val Leu Leu Val Ile Leu Leu Phe Lys
 20 25 30
 Val Gly Leu Ser Ile Leu Arg Phe Leu Ile Ser Val Gly Ile Val Leu
 35 40 45
 Leu Cys Ile Tyr Leu Gly Tyr Gln Gly Val Leu Trp Leu Phe Glu His
 50 55 60
 Phe Gln Asn Phe Ser Gly Phe Ile Arg
 65 70

<210> 5867

<211> 58

<212> PRT

<213> S.epidermidis

<400> 5867

Val Ile Leu Gln Leu Lys Ile Val Asn Ser Lys Lys Phe Gly Thr Leu
 1 5 10 15
 Leu Lys His Ile Tyr Lys Phe Phe Gln Leu Glu Lys Cys Ile Leu Thr
 20 25 30
 Thr Ile Lys Lys Cys Arg Tyr Phe Gly Lys Lys Leu Asn Val Asp Tyr
 35 40 45
 Asn Leu Ser Asn Leu Phe Lys His Ser Thr
 50 55

<210> 5868

<211> 44

<212> PRT

<213> S.epidermidis

<400> 5868

Asn Ser Ser His Ile Tyr Phe Cys Leu Arg Leu Phe Ile Ile Asn Val

1 5 10 15
 Glu Glu Cys Asp Ile Cys Tyr Tyr Leu Pro Ile Leu Val Ala Leu Tyr
 20 25 30
 Leu Val Phe Phe Ile Asn Phe Ala Ile Lys Ile Tyr
 35 40

<210> 5869
 <211> 53
 <212> PRT
 <213> S.epidermidis

<400> 5869
 Lys Val Phe Lys Leu Ile Arg Ile Asn Pro Ile Lys Leu Arg Lys Lys
 1 5 10 15
 Thr Glu Lys Phe Ile Thr Leu Ile Lys Phe Asn Ile Asn Glu Ile Asp
 20 25 30
 Ile Ile Ile Gln Val Lys Glu Lys Lys Thr Ser Asn Ile Glu Pro Ser
 35 40 45
 Gly Thr Cys Leu Val
 50

<210> 5870
 <211> 126
 <212> PRT
 <213> S.epidermidis

<400> 5870
 Arg Ser Ser Lys Glu Glu Phe Ile Met Pro Arg Val Lys Gly Gly Thr
 1 5 10 15
 Val Thr Arg Ala Arg Arg Lys Lys Thr Ile Lys Leu Ala Lys Gly Tyr
 20 25 30
 Phe Gly Ser Lys His Thr Leu Tyr Lys Val Ala Lys Gln Gln Val Met
 35 40 45
 Lys Ser Gly Gln Tyr Ala Phe Arg Asp Arg Arg Gln Arg Lys Arg Asp
 50 55 60
 Phe Arg Lys Leu Trp Ile Thr Arg Ile Asn Ala Ala Ala Arg Gln His
 65 70 75 80
 Asp Ile Ser Tyr Ser Arg Leu Met Asn Gly Leu Lys Lys Ala Glu Ile
 85 90 95
 Asp Ile Asn Arg Lys Met Leu Ser Glu Ile Ala Ile Ser Asp Asp Lys
 100 105 110
 Ala Phe Ala Glu Leu Val Ser Lys Ala Lys Glu Ala Leu Lys
 115 120 125

<210> 5871
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 5871
 Val Val Pro Lys Ile Ser Val Trp Ser Ser Pro Ile Leu Val Ser Met
 1 5 10 15
 Asp Ser Thr Gly Leu Lys Thr Phe Val Glu Ser Phe Leu Ile Pro Lys
 20 25 30
 Pro Ala Ser Ile Ile Thr Lys Ser Thr Gly Phe Ile Ser Pro Lys
 35 40 45

<210> 5872
 <211> 309
 <212> PRT
 <213> S.epidermidis

<400> 5872

Arg Met Arg Lys Leu Ile Val Gly Ser Arg Arg Ser Lys Leu Ala Leu
 1 5 10 15
 Thr Gln Ser Gln Gln Phe Ile Asp Lys Leu Lys Phe Ile Asp Pro Ser
 20 25 30
 Leu Asp Ile Glu Ile Lys Glu Ile Val Thr Lys Gly Asp Lys Ile Val
 35 40 45
 Asp Lys Gln Leu Ser Lys Val Gly Gly Lys Gly Leu Phe Val Lys Glu
 50 55 60
 Ile Gln Asn Glu Leu Phe Asn Lys Glu Ile Asp Met Ala Ile His Ser
 65 70 75 80
 Leu Lys Asp Val Pro Ser Met Ile Pro Asp Gly Leu Thr Leu Gly Cys
 85 90 95
 Ile Pro Asp Arg Glu Ile Pro Phe Asp Ala Tyr Ile Ala Lys Asn His
 100 105 110
 Ile Pro Leu Gln Glu Leu Ser Glu Gly Ser Ile Val Gly Thr Ser Ser
 115 120 125
 Leu Arg Arg Gly Ala Gln Ile Leu Ser Lys Tyr Pro His Leu Lys Ile
 130 135 140
 Lys Trp Ile Arg Gly Asn Ile Asp Thr Arg Leu Lys Lys Leu Glu Thr
 145 150 155 160
 Glu Asp Tyr Asp Ala Ile Ile Leu Ala Ala Gly Leu Lys Arg Met
 165 170 175
 Gly Trp Ser Asp Asn Ile Val Thr Thr Tyr Leu Asp Arg Asp Ile Leu
 180 185 190
 Leu Pro Ala Ile Gly Gln Gly Ala Leu Gly Ile Glu Cys Arg Ser Asp
 195 200 205
 Asp Lys Glu Leu Leu Asp Leu Leu Ser Lys Val His Asn His Asp Val
 210 215 220
 Ala Gln Cys Val Thr Ala Glu Arg Thr Phe Leu Ser Glu Met Asp Gly
 225 230 235 240
 Ser Cys Gln Val Pro Ile Gly Gly Tyr Ala Thr Ile Ala Gln Asp Asn
 245 250 255
 Gln Ile Glu Phe Thr Gly Leu Ile Met Ser Pro Asp Gly Lys Glu Arg
 260 265 270
 Tyr Glu His Thr Ala Leu Gly Thr Asp Pro Val Lys Leu Gly Ile Glu
 275 280 285
 Val Ser Gln Val Leu Lys Lys Gln Gly Ala Tyr Asp Ile Ile Lys Lys
 290 295 300
 Leu Asn Glu Ala Glu
 305

<210> 5873
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 5873

Ile His Asn Lys Thr Met Pro Thr Glu Ile Lys Lys Arg Asn Ile Asp
 1 5 10 15

Asn Pro Thr Leu Asn Lys Arg Met Thr Ser Lys Thr Ile Lys Ile Ile
 20 25 30
 Val Lys Met Leu Ile Met Leu Asn Leu Leu Lys Ser Leu Ile Leu Tyr
 35 40 45
 Met

<210> 5874
 <211> 173
 <212> PRT
 <213> S.epidermidis

<400> 5874
 Ile Ile Leu Asn Leu Ile Cys Lys Arg Arg Ala Tyr Met Arg Tyr Ile
 1 5 10 15
 Phe Ser Val Ile Lys Asn Ile Ile Ala Val Leu Ala Ile Ile Leu Ile
 20 25 30
 Ile Tyr Ile Ala Leu Gln His Ala Pro Phe Leu Lys Asn Gln Glu Trp
 35 40 45
 Asn Pro Leu Asn Asp Met Asn Asn His His Gln Asn Ile Thr Gln Lys
 50 55 60
 Val Ser Gln Lys Asn Asn Thr Leu Tyr Ser Gln Pro Ser Asn Asp Lys
 65 70 75 80
 Ser Tyr Ile Leu Lys Glu Asn Asp Ile Ile Asn Asn Val Pro Ala Gly
 85 90 95
 Gln Ile Lys Thr Val Phe Asn Met Ile Asp Lys Ala Glu Phe Met Ser
 100 105 110
 Val Ser Gly Leu Glu Arg Met Gly Phe Asn Asp Glu Tyr Leu Ala Gly
 115 120 125
 Gln Gln Gly Asp Glu Phe Ile Tyr Lys Phe Gly Asp Asp Tyr Ile
 130 135 140
 Arg Val Tyr Asn Thr Glu Phe Glu Met Asn Glu Asp Leu Asn Gln Leu
 145 150 155 160
 Lys Gln Pro Ile Asn Leu Lys Pro Ile Glu Ala Tyr Gln
 165 170

<210> 5875
 <211> 46
 <212> PRT
 <213> S.epidermidis

<400> 5875
 His Leu Leu Lys Glu Asp Met Asn Thr Thr Tyr Arg Leu Lys Glu Cys
 1 5 10 15
 Gly Asp Ile Leu Gly Ile Asn Leu Leu Asp His Ile Ile Ile Gly Asp
 20 25 30
 Asn Lys Phe Thr Ser Leu Val Glu Ala Gly Tyr Phe Asp Lys
 35 40 45

<210> 5876
 <211> 61
 <212> PRT
 <213> S.epidermidis

<400> 5876
 Lys Val Gly Asn Lys Met Lys Phe Asp Arg His Arg Arg Leu Arg Ser

2517

1		5		10		15
Ser	Lys	Thr	Met	Arg	Asp	Leu
				20		25
Asp	Leu	Ile	Tyr	Pro	Ile	Phe
				35		40
Glu	Ile	Lys	Ser	Leu	Pro	Gly
				50		55
						60

<210> 5877

<211> 40

<212> PRT

<213> S.epidermidis

<400> 5877

Asn	Asp	Asn	Glu	Leu	Val	Ile	Ser	Lys	Lys	Leu	Lys	His	Pro	Glu	His
1				5					10					15	
Leu	Tyr	Met	Thr	Lys	Ile	Ser	Ile	Leu	Ile	Tyr	Phe	Ile	Leu	Leu	Ile
				20				25					30		
Gln	Leu	Asn	Lys	Ala	Leu	Thr	Leu								
		35					40								

<210> 5878

<211> 274

<212> PRT

<213> S.epidermidis

<400> 5878

Phe	Gly	Asp	Asp	Met	Gln	Glu	Thr	Leu	Leu	Ile	Arg	Phe	His	Glu	Ile
1				5					10					15	
Ile	Leu	Met	Ile	Tyr	Leu	Phe	Ser	Ile	Ile	Cys	Tyr	Phe	Val	Asp	Phe
				20				25					30		
Ile	Asn	Lys	Asn	Tyr	Lys	Thr	Arg	Thr	Val	Gly	Phe	Tyr	Ser	Leu	Gly
				35			40				45				
Ile	Val	Trp	Val	Leu	Gln	Thr	Ile	Ser	Leu	Ser	Ile	Phe	Phe	Ile	His
	50					55					60				
Thr	Lys	Gln	Val	Pro	Leu	Gly	Ser	Ile	Phe	Asp	Val	Phe	Phe	Ser	Leu
65				70					75					80	
Thr	Trp	Ile	Ile	Ile	Ser	Ile	Ser	Leu	Ile	Leu	Asn	Leu	Ile	Lys	Val
				85				90						95	
Met	Asn	Phe	Ser	Val	Phe	Phe	Leu	Asn	Leu	Ile	Gly	Phe	Ile	Leu	Met
			100				105						110		
Ser	Leu	Asn	Thr	Phe	Gln	Pro	Glu	His	Tyr	Gln	Thr	Gln	Ile	Gln	Gln
		115				120					125				
Ile	Ala	Val	Ile	Asn	Glu	Leu	Leu	Val	His	Ile	Ala	Leu	Ala	Val	
	130				135				140						
Leu	Ser	Tyr	Ala	Phe	Phe	Ala	Ile	Ala	Phe	Val	Asn	Ser	Leu	Leu	Tyr
145				150					155					160	
Ile	Ile	Gln	Tyr	Arg	Asn	Leu	Lys	Glu	Lys	Asn	Phe	Asp	Gln	Asn	Tyr
				165				170					175		
Phe	Arg	Ile	Gly	Ser	Val	Ala	Thr	Leu	Glu	Thr	Ile	Val	Phe	Tyr	Ser
			180				185					190			
Thr	Leu	Val	Ala	Trp	Ile	Ile	Leu	Ile	Leu	Ser	Thr	Ile	Leu	Gly	Ala
	195					200					205				
Gln	Trp	Gly	Ile	Phe	Ala	Val	Gly	Lys	Gln	Ile	Phe	Ile	Asp	Pro	Lys
	210				215				220						
Val	Ile	Phe	Ser	Thr	Ile	Ile	Thr	Leu	Leu	Tyr	Gly	Val	Tyr	Ile	Phe

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225 230 235 240
 Ile Arg Ile Lys Lys Trp Ile Ser Gln Arg Asn Leu Ile Tyr Phe Asn
 245 250 255
 Ile Ile Leu Phe Cys Leu Cys Met Ile Asn Leu Phe Phe Leu Thr His
 260 265 270
 Phe Arg

<210> 5879

<211> 87

<212> PRT

<213> S.epidermidis

<400> 5879

Ser Ser Ala Leu Val Glu Leu Ile Thr Met Ser Val Val Ser Asn Lys
 1 5 10 15
 Asp Gly Asn Ala Glu Ser Glu Ser Tyr Glu Thr Leu Cys Phe Ser Ala
 20 25 30
 Lys Ile Leu Ala Leu Asp Asn Val Arg Leu Thr Ile Val Thr Phe Glu
 35 40 45
 Ile Pro Glu Pro Lys Arg Phe Lys Ser Asp Asn Ser Pro Ile Ser Pro
 50 55 60
 Ala Pro Ile Thr Thr Ala Cys Leu Leu Phe Asn Phe Pro Asn Thr Phe
 65 70 75 80
 Leu Ala Asn Ser Thr Ala Ala
 85

<210> 5880

<211> 208

<212> PRT

<213> S.epidermidis

<400> 5880

Tyr Ile Ile Leu Leu Ile Tyr Ile Ile Met Asp Ile Lys Ile Ser Gln
 1 5 10 15
 Cys Ile Gly Asp Glu Ile Met Asn Glu Cys Ala Phe Asn Thr Thr Asp
 20 25 30
 Pro Ile Tyr Ile Glu Tyr His Asp Tyr Tyr Trp Gly Gln Pro Ile Tyr
 35 40 45
 Asp Ser Lys Glu Leu Phe Lys Leu Met Ala Leu Glu Ser Gln His Ala
 50 55 60
 Gly Leu Ser Trp Leu Thr Ile Leu Lys Lys Lys Glu Ser Tyr Glu Gln
 65 70 75 80
 Ala Phe Tyr Asn Phe Glu Pro Gln Phe Ile Ala His Met Thr Glu Gln
 85 90 95
 Asp Ile Asp Tyr Leu Met Lys Phe Pro Asn Ile Ile His Asn Arg Lys
 100 105 110
 Lys Leu Glu Ala Ile Val Ser Gln Ala Lys Gly Tyr Leu Lys Ile Glu
 115 120 125
 Lys Asp Tyr Gly Ser Phe Ser Lys Phe Leu Trp Ser Tyr Val Asn His
 130 135 140
 Gln Pro Ile Asn Met Gly Tyr Lys Lys Pro Arg Asp Arg Lys Lys Val
 145 150 155 160
 Asp Gln Arg Ala Thr Gln Leu Ser Lys Asp Leu Lys Ala Tyr Gly Phe
 165 170 175
 Lys Phe Leu Gly Pro Val Thr Val Phe Ser Phe Leu Glu Ala Ala Gly

			180					185					190				
Leu	Tyr	Asp	Ser	His	Leu	Glu	Gly	Cys	Pro	Phe	Lys	Pro	Asn	His	Glu		
		195					200					205					

<210> 5881
 <211> 205
 <212> PRT
 <213> S.epidermidis

<400> 5881

Leu	Tyr	Asn	Ser	Ile	Arg	Lys	Arg	Lys	Ser	Met	Asn	Ile	Asn	Phe	Asn		
1				5					10					15			
Asn	Ile	Asn	Leu	Ile	Ile	Ser	Ala	Val	Lys	Lys	Ala	Gln	Tyr	Pro	Asp		
			20					25				30					
Thr	Gly	Leu	Thr	Glu	Val	Ala	Leu	Ser	Gly	Arg	Ser	Asn	Val	Gly	Lys		
		35					40					45					
Ser	Thr	Phe	Ile	Asn	Ser	Met	Ile	Gly	Arg	Lys	Asn	Met	Ala	Arg	Thr		
	50					55					60						
Ser	Gln	Gln	Pro	Gly	Lys	Thr	Gln	Thr	Leu	Asn	Phe	Tyr	Asn	Ile	Asp		
65					70					75					80		
Glu	Gln	Leu	Ile	Phe	Val	Asp	Val	Pro	Gly	Tyr	Gly	Tyr	Ala	Lys	Val		
				85					90					95			
Ser	Lys	Val	Gln	Arg	Glu	Lys	Phe	Gly	Lys	Met	Ile	Glu	Glu	Tyr	Ile		
			100					105					110				
Thr	Gln	Arg	Glu	Asn	Leu	Lys	Leu	Val	Ile	Gln	Leu	Val	Asp	Leu	Arg		
		115					120						125				
His	Gln	Pro	Thr	Glu	Asp	Asp	Val	Leu	Met	Tyr	Asn	Tyr	Leu	Lys	His		
	130					135					140						
Phe	Asp	Ile	Pro	Thr	Leu	Val	Ile	Cys	Thr	Lys	Glu	Asp	Lys	Ile	Ala		
145					150					155					160		
Lys	Gly	Lys	Val	Gln	Lys	His	Ile	Lys	Arg	Ile	Lys	Asp	Lys	Leu	Glu		
				165					170					175			
Leu	Glu	Ser	Gly	Asp	Asn	Ile	Ile	Ser	Tyr	Ser	Ser	Ile	Lys	Asn	Ser		
			180					185					190				
Lys	Gln	Gln	Glu	Ile	Trp	Asn	Phe	Ile	Glu	Thr	Tyr	Ile					
		195					200					205					

<210> 5882
 <211> 358
 <212> PRT
 <213> S.epidermidis

<400> 5882

Ser	Gly	Ile	Leu	Lys	Arg	Asn	Phe	Ile	Asn	Asn	Leu	Ile	Ile	Leu	Leu		
1				5					10					15			
Ile	Ala	Ile	Met	Leu	Ser	Leu	Leu	Leu	Lys	Met	Leu	His	Val	Ile	Leu		
			20						25				30				
Pro	Phe	Met	Phe	Gly	Pro	Ile	Leu	Ala	Ala	Leu	Leu	Cys	Val	Lys	Val		
		35					40					45					
Leu	Lys	Leu	Lys	Ile	Arg	Trp	Pro	Phe	Trp	Leu	Ser	Gln	Ile	Gly	Leu		
	50					55					60						
Ile	Leu	Leu	Gly	Val	Gln	Ile	Gly	Ser	Thr	Phe	Thr	Gln	Gln	Val	Ile		
65					70					75					80		
Lys	Asp	Ile	Ser	Lys	Asn	Trp	Leu	Thr	Ile	Val	Phe	Val	Thr	Ile	Leu		
				85					90					95			
Leu	Ile	Leu	Leu	Ala	Leu	Ile	Ile	Ala	Phe	Phe	Phe	Lys	Lys	Ile	Ala		

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<210> 5883
<211> 427
<212> PRT
<213> S.epidermidis
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Arg	His	Arg	Ser	Met	Ile	Met	Asn	Tyr	Leu	Asp	Ser	Leu	Tyr	Trp	Ile
1				5					10					15	
His	Glu	Arg	Ser	Lys	Phe	Gly	Ile	Lys	Pro	Gly	Val	Lys	Arg	Met	Glu
			20					25					30		
Trp	Met	Leu	Glu	Gln	Leu	Asn	Asn	Pro	Gln	His	Lys	Ile	Arg	Gly	Ile
		35					40					45			
His	Val	Gly	Gly	Thr	Asn	Gly	Lys	Gly	Ser	Thr	Val	Ala	Tyr	Leu	Arg
	50					55				60					
Thr	Ala	Leu	Ile	Glu	Asn	Asp	Tyr	Ser	Val	Gly	Thr	Phe	Thr	Ser	Pro
65				70					75					80	
Phe	Ile	Glu	Ser	Phe	Asn	Glu	Arg	Ile	Ser	Leu	Asn	Gly	Val	Pro	Ile
				85					90					95	
Met	Asn	Asp	Glu	Ile	Val	Gln	Leu	Val	Glu	Arg	Val	Lys	Pro	Val	Ser
			100					105					110		
Glu	Ala	Leu	Glu	Ile	Glu	Thr	Asp	Leu	Gly	Gly	Ala	Thr	Glu	Phe	Glu
		115					120					125			


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Ile Ile Thr Thr Met Met Phe Leu Tyr Phe Gly Glu Ile Asn Pro Val
130 135 140
Asp Phe Val Ile Ile Glu Ala Gly Leu Gly Ile Lys Asn Asp Ser Thr
145 150 155 160
Asn Val Phe Lys Pro Val Leu Ser Ile Leu Thr Ser Ile Gly Leu Asp
165 170 175
His Thr Asp Ile Leu Gly Thr Thr Tyr Leu Asp Ile Ala Lys Asp Lys
180 185 190
Ala Ala Ile Ile Lys Pro His Ile Pro Ile Val Tyr Ala Val Lys Asn
195 200 205
Asp Asp Ala Leu Lys Tyr Val Arg Asp Tyr Ala Leu Glu Gln Asn Ala
210 215 220
Lys Pro Ile Glu Leu Asp Arg Glu Ile Thr Val Val Ser Gln Asp Asp
225 230 235 240
Glu Phe Thr Tyr Arg Tyr Lys Asp Tyr Glu Leu Glu Thr Ile Ile Leu
245 250 255
Asn Met Leu Gly Glu His Gln Lys Glu Asn Ala Ala Leu Ala Ile Thr
260 265 270
Ala Leu Ile Glu Leu Asn Glu Arg Gln Ile Ile Glu Leu Asp Phe Asn
275 280 285
Lys Met Ile Asp Gly Ile Glu Ser Val Asn Trp Thr Gly Arg Ile Glu
290 295 300
Gln Val Lys Glu Gln Pro Leu Met Val Ile Asp Gly Ala His Asn Asn
305 310 315 320
Arg Ser Ile Asp Ala Leu Val Asp Thr Ile Arg His Tyr Tyr Gly Arg
325 330 335
Asp Lys Ile Asp Ile Leu Phe Ser Ala Ile Lys Gly Lys Pro Ile His
340 345 350
Ser Met Ile Asn Lys Leu Asn Asp Ile Ala Ser Lys Phe Tyr Ile Ala
355 360 365
Asp Phe Glu Phe Pro Lys Ala Leu Ala Lys Glu Glu Ile Ala Glu Glu
370 375 380
Leu Lys Leu Asp Asn Leu His Leu Ile Asp Asp Tyr Val Asp Phe Ile
385 390 395 400
Glu Asn Tyr Glu Gly Asp Gly Leu Ile Ile Thr Gly Ser Leu Tyr Phe
405 410 415
Ile Ser Glu Val Lys Ala Lys Ile Asn Phe Asn
420 425

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<210> 5884

<211> 229

<212> PRT

<213> S.epidermidis

<400> 5884

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Asn Lys Phe Met Lys Pro Val Ile Val Met Thr Gln Thr Asn Glu Val
1 5 10 15
His Ser His Leu Val Asp Ile Ile His Lys Pro Phe Ile Gln Leu Lys
20 25 30
Gln Leu His Phe Asn Glu Lys Leu Leu Asp His Ser Tyr Asp Trp Leu
35 40 45
Ile Phe Ser Ser Lys Asn Ala Val Lys Tyr Phe Tyr Pro Tyr Leu Lys
50 55 60
Asn Val Lys Val Lys Lys Val Ala Val Ile Gly Asp Lys Thr Ala Gln
65 70 75 80
Tyr Cys Asn Glu Leu Gly Ile Ser Val Asp Phe Val Pro Arg Asp Phe

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				85					90					95			
Ser	Gln	Glu	Gly	Phe	Leu	Asp	Glu	Phe	Lys	Ile	Ser	Glu	Gln	His	Leu		
			100					105					110				
Leu	Leu	Pro	Ser	Ser	Glu	Lys	Ala	Arg	Ser	Lys	Leu	Val	Gln	Gln	Leu		
		115					120					125					
Ser	Lys	Tyr	Asn	Glu	Val	Val	Lys	Ile	Asp	Leu	Tyr	Arg	Pro	Val	Pro		
		130				135					140						
Asn	Phe	Lys	Asn	Ile	Ser	Gln	Val	Lys	Ser	Leu	Val	Arg	Lys	His	Gln		
145					150					155					160		
Ile	Asp	Ala	Val	Thr	Phe	Ser	Ser	Ser	Ser	Ala	Val	Glu	Phe	Tyr	Phe		
				165					170					175			
Lys	Glu	Asp	Asn	Val	Pro	Glu	Phe	Asp	His	Tyr	Phe	Ala	Ile	Gly	Lys		
			180					185					190				
Gln	Thr	Ala	Arg	Thr	Ile	Leu	Lys	Phe	Asn	Thr	Ser	Val	Lys	Val	Ala		
		195					200					205					
Asn	Lys	Gln	Thr	Leu	Asp	Ser	Leu	Ile	Asp	Lys	Ile	Ile	Glu	Ser	Arg		
	210				215						220						
Glu	Gln	Asn	Glu	Ile													
225																	

<210> 5885

<211> 431

<212> PRT

<213> S.epidermidis

<400> 5885

Gly	Gly	His	Met	Met	Ser	Phe	Glu	Lys	Ser	Ile	Lys	Ala	Met	Glu	Gln		
1			5						10				15				
Ala	Glu	Lys	Leu	Met	Pro	Gly	Gly	Val	Asn	Ser	Pro	Val	Arg	Ala	Phe		
			20					25				30					
Lys	Ser	Val	Asp	Thr	Pro	Ala	Ile	Phe	Met	Asp	His	Gly	Glu	Gly	Ser		
		35					40					45					
Lys	Ile	Tyr	Asp	Ile	Asp	Gly	Asn	Glu	Tyr	Ile	Asp	Tyr	Val	Leu	Ser		
	50					55					60						
Trp	Gly	Pro	Leu	Ile	Leu	Gly	His	Lys	Asn	Gln	Gln	Val	Ile	Ser	Lys		
65					70					75					80		
Leu	His	Glu	Ala	Val	Asp	Lys	Gly	Thr	Ser	Phe	Gly	Ala	Ser	Thr	Leu		
				85					90					95			
Gln	Glu	Asn	Lys	Leu	Ala	Glu	Leu	Val	Ile	Asp	Arg	Val	Pro	Ser	Ile		
			100					105				110					
Glu	Lys	Val	Arg	Met	Val	Ser	Ser	Gly	Thr	Glu	Ala	Thr	Leu	Asp	Thr		
		115					120					125					
Leu	Arg	Leu	Ala	Arg	Gly	Tyr	Thr	Gly	Arg	Asn	Lys	Ile	Ile	Lys	Phe		
	130					135					140						
Glu	Gly	Cys	Tyr	His	Gly	His	Ser	Asp	Ser	Leu	Leu	Ile	Lys	Ala	Gly		
145					150					155					160		
Ser	Gly	Val	Ala	Thr	Leu	Gly	Leu	Pro	Asp	Ser	Pro	Gly	Val	Pro	Glu		
				165					170					175			
Gly	Ile	Ala	Lys	Asn	Thr	Ile	Thr	Val	Pro	Tyr	Asn	Asp	Leu	Asp	Ser		
		180						185				190					
Leu	Lys	Leu	Ala	Phe	Glu	Lys	Tyr	Gly	Asp	Asp	Ile	Ala	Gly	Val	Ile		
		195					200					205					
Val	Glu	Pro	Val	Ala	Gly	Asn	Met	Gly	Val	Val	Pro	Pro	Val	Asn	Gly		
	210					215					220						
Phe	Leu	Gln	Gly	Leu	Arg	Asp	Ile	Thr	Asn	Glu	Tyr	Gly	Ala	Leu	Leu		
225					230					235					240		

Ile Phe Asp Glu Val Met Thr Gly Phe Arg Val Gly Tyr Asn Cys Ala
 245 250 255
 Gln Gly Tyr Phe Gly Val Thr Pro Asp Leu Thr Cys Leu Gly Lys Val
 260 265 270
 Ile Gly Gly Gly Leu Pro Val Gly Ala Phe Gly Gly Lys Lys Glu Ile
 275 280 285
 Met Asp Tyr Ile Ala Pro Val Gly Thr Ile Tyr Gln Ala Gly Thr Leu
 290 295 300
 Ser Gly Asn Pro Leu Ala Met Thr Ser Gly Tyr Glu Thr Leu Ser Gln
 305 310 315 320
 Leu Thr Pro Glu Ser Tyr Glu Tyr Phe Asn Ser Leu Gly Asp Ile Leu
 325 330 335
 Glu Lys Gly Leu Lys Glu Val Phe Ala Lys His Asn Val Pro Ile Thr
 340 345 350
 Val Asn Arg Ala Gly Ser Met Ile Gly Tyr Phe Leu Asn Glu Gly Pro
 355 360 365
 Val Thr Asn Phe Glu Glu Ala Asn Lys Ser Asp Leu Lys Leu Phe Ser
 370 375 380
 Asn Met Tyr Arg Glu Met Ala Lys Glu Gly Val Phe Leu Pro Pro Ser
 385 390 395 400
 Gln Phe Glu Gly Thr Phe Leu Ser Thr Ala His Thr Lys Asp Asp Ile
 405 410 415
 Glu Lys Thr Ile Gln Ala Phe Asp Asn Ala Leu Ser Arg Ile Val
 420 425 430

<210> 5886

<211> 98

<212> PRT

<213> S.epidermidis

<400> 5886

Ala Asp Val Leu Phe Leu Leu Ile Arg Phe Pro Ser Ser Ser Tyr Asn
 1 5 10 15
 Ser Gly Ser Ile Ser Ser Leu Ile Val Cys Ser Val Met Thr Thr Leu
 20 25 30
 Leu Thr Phe Ser Glu Glu Gly Thr Ser Tyr Met Met Ser Ile Asn Ala
 35 40 45
 Ser Ser Ile Ile Glu Arg Asn Pro Arg Ala Pro Val Leu Arg Ser Ile
 50 55 60
 Ala Phe Ser Leu Ile Ala Asp Arg Ala Ser Ser Glu Asn Ser Asn Ser
 65 70 75 80
 Thr Leu Ser Asn Ser Ser Ile Leu Val Tyr Cys Leu Thr Ser Ala Phe
 85 90 95
 Leu Gly

<210> 5887

<211> 207

<212> PRT

<213> S.epidermidis

<400> 5887

Lys Glu Ile Ile Met Ser Lys Phe Asp Glu Gln Ile Ile Val Val Asn
 1 5 10 15
 Arg Asp Ile Leu Phe Asn Lys Asp Lys Asn Ala Phe Asn Gly Phe Leu
 20 25 30

Leu Gln Ala Ala Phe Glu Leu Gly Glu Arg Ile Asn Ser Thr Ser Thr
 115 120 125
 Phe Asp Lys Val Gln Ile Thr His Pro Ser Asp Val Ala Ser Leu Met
 130 135 140
 Met Ser Thr Met Lys Asp Leu Glu Gln Glu His Phe Val Val Leu Leu
 145 150 155 160
 Leu Asn Ser Lys Asn Ile Val Thr Lys Gln Ala Trp Val Tyr Lys Gly
 165 170 175
 Thr Leu Asn Ser Ser Ile Ile His Pro Arg Glu Val Phe Asn Ile Ala
 180 185 190
 Ile Arg Glu Ser Ser Asn Ser Ile Ile Val Val His Asn His Pro Ser
 195 200 205
 Gly Asp Val Thr Pro Ser Glu Arg Gly Tyr Glu Tyr Asn Val
 210 215 220

<210> 5890

<211> 319

<212> PRT

<213> S.epidermidis

<400> 5890

Phe Phe Lys Ile Tyr His Asp Trp Ser Ala Lys Leu Met Ala Asp Ile
 1 5 10 15
 Ile Pro Phe Pro Gln Phe Lys Ser Lys Met Ile Lys Gln Ile Asn Asp
 20 25 30
 Ala Glu Arg Asn Ala Asp Phe Glu Lys Met Tyr Gln Leu Phe Asn Val
 35 40 45
 Tyr Glu Gln His Phe Asp Pro Asn Glu Glu Ile Ala Leu Lys Lys Cys
 50 55 60
 Gln Met Leu Leu Gln Leu Asn Ala Tyr Leu Glu Leu Arg Glu Glu Ala
 65 70 75 80
 Ile Ile Leu Leu Lys Arg Gly Phe Asn Cys Tyr Asp Glu Leu Met Ile
 85 90 95
 Tyr Tyr Ile Lys Ser Leu Asn Gly Leu Gly Gln Phe Asn Glu Ala Val
 100 105 110
 Glu Val Ile Asn Gln Ile Ile Asp Glu Val Lys Asn His Lys Thr Arg
 115 120 125
 Met Glu Leu Phe Pro Leu Lys Glu Tyr Ala Ile Ser Arg Leu Asp Glu
 130 135 140
 Asp Arg Lys Ala Leu Ser Ser Ser Leu Ser Asp Phe Gly Ser Leu Asn
 145 150 155 160
 Thr Arg Glu Gln Thr Ser Leu Ile Leu Gln Leu Ile Asp Asn Gly His
 165 170 175
 Tyr Asn Phe Lys Glu Ser Val Ala Asn Ile Leu Ile Ser Met Asp Leu
 180 185 190
 Pro Lys Asn Leu Val Ser Leu Met Leu Glu Tyr Leu Arg Phe Ala Glu
 195 200 205
 Tyr Ser His Thr Ile Thr Ile His Lys Tyr Gly Glu Thr Ile Asn Val
 210 215 220
 Asn Pro Asn His Leu Ser Gly Ile Glu His Thr Thr Ile Lys Asp Lys
 225 230 235 240
 Val Ile Pro Val Val Met Asn Arg Leu Glu Asp Gly Ala Leu His Ile
 245 250 255
 Leu Lys Glu Ala Gln His Ile Met Asn Asn His Ser Ile Leu Met Tyr
 260 265 270
 Pro Ile Asp Ile Glu Ser Leu Tyr Thr Ile Asp Asn Trp Ile Asp Ala

275 280 285
 Tyr Asp Val Tyr Phe Lys Gln Leu Ile Gly Ile Asp Ile Asn Gly Cys
 290 295 300
 Asn Asn Asp Thr Leu Gln Phe Ile Lys Ser Leu Asp Asn Glu Met
 305 310 315

<210> 5891
 <211> 448
 <212> PRT
 <213> S.epidermidis

<400> 5891
 Met His Phe Val Ala Ile Ser Ile Asn His Arg Thr Ala Asp Val Thr
 1 5 10 15
 Leu Arg Glu Gln Val Ala Phe Arg Asp Asp Ala Leu Arg Leu Ala His
 20 25 30
 Glu Asp Leu Tyr Glu Thr Lys Ala Ile Leu Glu Asn Val Ile Leu Ser
 35 40 45
 Thr Cys Asn Arg Thr Glu Val Tyr Ala Ile Val Asp Gln Val His Thr
 50 55 60
 Gly Arg Tyr Tyr Ile Gln Arg Phe Leu Ala Arg Ser Phe Gly Phe Glu
 65 70 75 80
 Val Asp Asp Ile Lys Asp Met Ser Glu Val Lys Val Gly Asp Asp Ala
 85 90 95
 Val Glu His Leu Leu Arg Val Thr Ser Gly Leu Asp Ser Ile Val Leu
 100 105 110
 Gly Glu Thr Gln Ile Leu Gly Gln Met Arg Asp Ala Phe Phe Leu Ala
 115 120 125
 Gln Asn Thr Gly Thr Thr Gly Thr Ile Phe Asn His Leu Phe Lys Gln
 130 135 140
 Ala Ile Thr Phe Ala Lys Lys Ala His Ser Glu Thr Asp Ile Ala Asp
 145 150 155 160
 Asn Ala Val Ser Val Ser Tyr Ala Ala Val Glu Leu Ala Lys Lys Val
 165 170 175
 Phe Gly Lys Leu Lys Ser Lys His Ala Val Val Ile Gly Ala Gly Glu
 180 185 190
 Met Gly Glu Leu Ser Leu Leu Asn Leu Leu Gly Ser Gly Ile Ser Asn
 195 200 205
 Val Thr Ile Val Asn Arg Thr Leu Ser Lys Ala Lys Ile Leu Ala Glu
 210 215 220
 Lys His Asn Val Ser Tyr Asp Ser Leu Ser Ala Leu Pro Ser Leu Leu
 225 230 235 240
 Glu Thr Thr Asp Ile Val Ile Ser Ser Thr Ser Ala Glu Asp Tyr Ile
 245 250 255
 Ile Thr Asn Ser Met Val Lys Thr Ile Ser Glu Thr Arg Lys Leu Asp
 260 265 270
 Ser Leu Val Leu Ile Asp Ile Ala Val Pro Arg Asp Ile Glu Pro Gly
 275 280 285
 Ile Asp Ala Ile Thr Asn Ile Phe Asn Tyr Asp Val Asp Asp Leu Lys
 290 295 300
 Asp Leu Val Asp Ala Asn Leu Arg Glu Arg Gln Leu Ala Ala Glu Thr
 305 310 315 320
 Ile Ala Gly Gln Ile Pro Glu Glu Ile Asp Ser His Asn Glu Trp Val
 325 330 335
 Asn Met Leu Gly Val Val Pro Val Ile Arg Ala Leu Arg Glu Lys Ala
 340 345 350

Met Asn Ile Gln Ala Glu Thr Met Glu Ser Ile Asp Arg Lys Leu Pro
 355 360 365
 Asp Leu Ser Glu Arg Glu Arg Lys Val Ile Ser Lys His Thr Lys Ser
 370 375 380
 Ile Ile Asn Gln Met Leu Lys Asp Pro Ile Lys Gln Ala Lys Glu Leu
 385 390 395 400
 Ser Thr Asp Lys Lys Ser Asn Glu Lys Leu Glu Leu Phe Gln Asn Ile
 405 410 415
 Phe Asp Ile Glu Ala Glu Asp Pro Arg Glu Lys Ala Lys Leu Glu Lys
 420 425 430
 Glu Ser Arg Ala Lys Glu Ile Leu Ala His Arg Ile Phe Ser Phe Glu
 435 440 445

<210> 5892

<211> 72

<212> PRT

<213> S.epidermidis

<400> 5892

Thr Asp Glu Val Thr Thr Asn Asp Lys Asn Ile Asn Gly Ile Lys Gly
 1 5 10 15
 Lys Tyr Leu Ile Ser Leu Lys Glu Lys Ile Phe Lys Ile Met Ala Lys
 20 25 30
 Ile Pro Pro Met Ile Asn Val Asn Thr Thr Ile Lys Lys Lys Lys Phe
 35 40 45
 Asn Gly Asn Ile Ser Pro Asn Ile Leu Lys Ser Asn Met Ser Pro Tyr
 50 55 60
 Pro Ile Asn Leu Asp Ala Asn Arg
 65 70

<210> 5893

<211> 78

<212> PRT

<213> S.epidermidis

<400> 5893

Arg Ile Leu Val Lys Arg Pro Ile Gly Asn Glu Ser Cys Leu Gly Met
 1 5 10 15
 Lys Thr His Arg Gly Ala Ala Lys Arg Val Lys Arg Thr Gly Ser Gly
 20 25 30
 Gln Leu Lys Arg Ser Arg Ala Phe Thr Ser His Leu Phe Ala Asn Lys
 35 40 45
 Asn Thr Lys Gln Lys Arg Gln Leu Arg Lys Ala Lys Leu Val Ser Lys
 50 55 60
 Ser Asp Met Lys Arg Val Lys Gln Leu Leu Ala Tyr Lys Lys
 65 70 75

<210> 5894

<211> 54

<212> PRT

<213> S.epidermidis

<400> 5894

Lys Ser Arg Val Lys Thr Trp Ala Tyr Met Asn Arg Leu Thr Pro Trp
 1 5 10 15
 Val Cys Ala Lys Arg Asp Val Arg Pro Ile Pro Lys Lys Arg Gly Ile

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<210> 5895
<211> 237
<212> PRT
<213> S.epidermidis
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<210> 5896
<211> 98
<212> PRT
<213> S.epidermidis
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<400> 5896

Val	Lys	Ile	Phe	Leu	Ser	Ala	Ala	Thr	Ser	Lys	Val	Ser	Arg	Leu	Ala
1				5					10					15	
Thr	Ile	Gly	Thr	Arg	Pro	Ile	Asn	Ser	Gly	Ile	Lys	Pro	Tyr	Asp	Trp
			20					25					30		
Arg	Ser	Ser	Gly	Arg	Ile	Cys	Ser	Ser	Lys	Ala	Ser	Ser	Ser	Tyr	Leu
		35					40					45			
Ser	Ala	Ser	Leu	Leu	Ala	Asn	Pro	Ile	Thr	Phe	Ser	Pro	Lys	Arg	Leu

50		55		60
Leu Met Thr Ser Ser Ile Pro Ser Lys Ala Pro Pro Lys Ile Asn Lys				
65		70		80
Met Phe Val Val Ser Ile Trp Ile Asn Ser Trp Phe Gly Cys Phe Arg				
	85		90	95
Pro Pro				

<210> 5897

<211> 286

<212> PRT

<213> S.epidermidis

<400> 5897

Lys Val Lys Leu Asn His Tyr Gln Ala Tyr Thr Lys Leu Val Phe Lys	
1	5 10 15
Lys Lys Ile Leu Leu His Glu Glu Ile Lys Glu Ala Tyr Asp Leu Gly	
	20 25 30
Ile Arg Ala Ile Met Phe Phe Gly Val Pro Asn Asp Lys Asp Asp Ile	
	35 40 45
Gly Ser Gly Ala Tyr Asp His Asn Gly Val Val Gln Glu Ala Thr Arg	
	50 55 60
Ile Ser Lys Asn Leu Tyr Lys Asp Leu Leu Ile Val Ala Asp Thr Cys	
65	70 75 80
Leu Cys Glu Tyr Thr Asp His Gly His Cys Gly Val Ile Asp Asp His	
	85 90 95
Thr His Asp Val Asp Asn Asp Lys Ser Leu Pro Leu Leu Val Lys Thr	
	100 105 110
Ala Ile Ser Gln Val Glu Ala Gly Ala Asp Ile Ile Ala Pro Ser Asn	
	115 120 125
Met Met Asp Gly Phe Val Ala Glu Ile Arg Glu Gly Leu Asp Gln Ala	
	130 135 140
Gly Tyr Gln Asn Ile Pro Ile Met Ser Tyr Gly Ile Lys Tyr Ala Ser	
145	150 155 160
Ser Phe Phe Gly Pro Phe Arg Asp Ala Ala Asp Ser Ala Pro Ser Phe	
	165 170 175
Gly Asp Arg Lys Thr Tyr Gln Met Asp Pro Ala Asn Arg Leu Glu Ala	
	180 185 190
Leu Arg Glu Leu Glu Ser Asp Leu Lys Glu Gly Cys Asp Met Met Ile	
	195 200 205
Val Lys Pro Ser Leu Ser Tyr Leu Asp Ile Ile Arg Asp Val Lys Asn	
	210 215 220
Asn Thr Asn Val Pro Val Val Ala Asn Asn Val Ser Gly Glu Tyr Ser	
225	230 235 240
Met Thr Lys Ala Ala Ala Leu Asn Gly Trp Ile Asp Glu Glu Lys Ile	
	245 250 255
Val Met Glu Gln Met Ile Ser Met Lys Arg Ala Gly Ala Asp Leu Ile	
	260 265 270
Ile Thr Tyr Phe Ala Lys Asp Ile Cys Arg Tyr Leu Asp Lys	
	275 280 285

<210> 5898

<211> 51

<212> PRT

<213> S.epidermidis

000001-000050
 000051-000100
 000101-000150
 000151-000200
 000201-000250
 000251-000300
 000301-000350
 000351-000400
 000401-000450
 000451-000500
 000501-000550
 000551-000600
 000601-000650
 000651-000700
 000701-000750
 000751-000800
 000801-000850
 000851-000900
 000901-000950
 000951-001000
 001001-001050
 001051-001100
 001101-001150
 001151-001200
 001201-001250
 001251-001300
 001301-001350
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 001601-001650
 001651-001700
 001701-001750
 001751-001800
 001801-001850
 001851-001900
 001901-001950
 001951-002000
 002001-002050
 002051-002100
 002101-002150
 002151-002200
 002201-002250
 002251-002300
 002301-002350
 002351-002400
 002401-002450
 002451-002500
 002501-002550
 002551-002600
 002601-002650
 002651-002700
 002701-002750
 002751-002800
 002801-002850
 002851-002900
 002901-002950
 002951-003000

<400> 5898

Phe Tyr Thr Ser Pro Lys Gly Pro Pro Ala Ala Ile Ser Ile Lys Ile
 1 5 10 15
 Ala Lys Tyr Asp Asn Ser Phe Leu Gln Val Glu Asn Tyr Phe Asn Phe
 20 25 30
 Leu Tyr Ser Val Lys Asp Met Asn Leu Ser Ser Ser Phe Phe Val Gly
 35 40 45
 Phe Leu Ser
 50

<210> 5899

<211> 167

<212> PRT

<213> S.epidermidis

<400> 5899

Glu Ala Phe Leu Met Asp Trp Ile Leu Pro Ile Ala Gly Ile Ile Ala
 1 5 10 15
 Ala Ile Ala Phe Leu Ile Leu Cys Ile Gly Ile Val Val Val Leu Ile
 20 25 30
 Ser Val Lys Lys Asn Leu Asp Tyr Val Ala Lys Thr Leu Asp Gly Val
 35 40 45
 Glu Gly Gln Val Gln Gly Ile Thr Arg Glu Thr Thr Asp Leu Leu His
 50 55 60
 Lys Val Asn Arg Leu Thr Glu Asp Ile Gln Gly Lys Val Asp Arg Leu
 65 70 75 80
 Asn Ser Val Val Asp Ala Val Lys Gly Ile Gly Asp Ser Val Gln Asn
 85 90 95
 Leu Asn Gly Ser Val Asp Arg Val Thr Asn Ser Ile Thr His Asn Ile
 100 105 110
 Ser Gln Asn Glu Asp Lys Ile Ser Gln Val Val Gln Trp Ser Asn Val
 115 120 125
 Ala Met Glu Ile Ala Asp Lys Trp Gln Asn Arg Tyr Asn Arg Arg Gly
 130 135 140
 Ser Ala Asn Tyr Lys Thr Asn Thr Val Ala Asp Asp Ala Asn His Ser
 145 150 155 160
 Tyr Asn Ser Arg Val Asn Lys
 165

<210> 5900

<211> 78

<212> PRT

<213> S.epidermidis

<400> 5900

Ala Asn Leu Ser Leu Leu Ile Glu Tyr Asn Ile Leu Val Glu Ala Tyr
 1 5 10 15
 Ile Pro Glu Leu Pro Ala Asp Asn Thr Leu Val Asn Ile Thr Ala Phe
 20 25 30
 Ile Asn Glu Ala Ala Lys Ala Asn Pro Ala Phe Leu Asn Thr Asn Val
 35 40 45
 Lys Gly Glu Val Ala Ile Leu Ser Pro Pro Pro Ile Asn Ala Leu Leu
 50 55 60
 Ser Tyr Gly Ile Asn Ile Pro Ile Met Lys Ile Ala Arg Met
 65 70 75

<210> 5901
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 5901
 Phe Cys Leu Ser Lys Leu Thr Glu Asn Gly Phe Thr Val Glu Leu Gly
 1 5 10 15
 Thr Phe Pro Leu Thr Asn Glu Thr Ser Val Glu Leu Ser Thr Tyr Ser
 20 25 30
 Lys Phe Ser Gly Ser Val Thr Leu
 35 40

<210> 5902
 <211> 366
 <212> PRT
 <213> S.epidermidis

<400> 5902
 Gly Val Arg Phe Tyr Met Thr Ile Asp Asn Ser Lys Thr Leu Glu Arg
 1 5 10 15
 Ile Lys Ile Leu Thr Glu Leu His Gly Ala Pro Gly Phe Glu Asp Glu
 20 25 30
 Val Arg Ser Tyr Met Lys Ser Glu Met Glu Pro Tyr Val Asp Lys Phe
 35 40 45
 Ile Gln Asn Lys Met Gly Gly Phe Tyr Gly Ile Lys Lys Ser Asn Lys
 50 55 60
 Glu Asn Ala Pro Arg Val Met Ile Ala Ala His Met Asp Glu Ile Gly
 65 70 75 80
 Phe Met Ile Thr His Ile Asn Asp Asn Gly Met Ile Gln Phe Thr Asn
 85 90 95
 Leu Gly Gly Val Ala Asn Asp Ile Trp Gln Gly Gln Arg Leu Lys Ile
 100 105 110
 Lys Asn Arg Tyr Gly Lys Glu Ile Ile Gly Val Val Ala Asn Ile Pro
 115 120 125
 Lys His Phe Arg Thr Gly Asn Glu Ser Ile Pro Gln Ile Lys Asp Leu
 130 135 140
 Met Leu Asp Ile Gly Ala Ser Ser Ser Glu Glu Val Arg Asn Arg Gly
 145 150 155 160
 Val Glu Val Gly Asp Thr Ile Val Pro His Thr Ile Met Thr Gln Leu
 165 170 175
 Ser Lys Asn Arg Tyr Ser Ala Lys Ala Trp Asp Asn Arg Tyr Gly Cys
 180 185 190
 Val Leu Ala Ile Glu Ile Leu Glu Leu Leu Lys Asp Val Gln Leu Asp
 195 200 205
 Val Asp Leu Tyr Val Gly Ala Asn Val Gln Glu Glu Val Gly Leu Arg
 210 215 220
 Gly Ala Lys Ala Ala Ala Lys Gln Ile Asp Pro Asp Ile Ala Phe Val
 225 230 235 240
 Val Asp Cys Ser Pro Ala Asn Asp Ile Lys Gly Lys Gln Gln Leu Ser
 245 250 255
 Gly Val Leu Gly Glu Gly Thr Leu Ile Arg Ile Lys Asp Gly Thr Met
 260 265 270
 Ile Leu Lys Pro Leu Phe Arg Asp Tyr Leu Leu Lys Leu Ala Glu Glu
 275 280 285
 Asn Gln Ile Ala Tyr Gln Tyr Tyr Ile Ser Pro Gly Gly Thr Asp Gly

290		295		300
Gly Glu Ile His Lys	Glu Asn Glu Gly Ile Pro Thr Ala Val Ile Gly			
305		310		315
Val Cys Ala Arg Tyr	Ile His Ser Thr Asp Ala Val Phe Asp Ile Arg			320
		325		330
Asp Tyr Phe Ser Ala Arg His Leu Leu Lys Glu Ser Ile Ile His Leu				335
		340		345
Thr Ser Gly Gln Ile Gln Gln Leu Gln Tyr Gly Lys Glu Phe				350
		355		360
				365

<210> 5903
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 5903
Ile Gln Ile Ser Ser Trp Leu Asn Ile Arg Lys Val Thr Ala Gln Arg
1 5 10 15
Ala Glu Asn His Gln Lys Asn Tyr Lys Lys Asp Asn Ser Tyr Ile Ile
20 25 30
Ser Ile Glu Ile Val Phe Ile Tyr Leu Ser Trp Thr Phe
35 40 45

<210> 5904
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 5904
Ile Gln Thr Ser Ser Trp Leu Asn Ile Arg Lys Val Thr Ala Gln Arg
1 5 10 15
Ala Glu Asn Asn Gln Lys Asn Tyr Arg Lys Arg Gln Phe Leu Tyr Tyr
20 25 30
Phe Asn Arg Asn Cys Leu Phe Leu Leu Ile Leu Asn Leu Phe Val Pro
35 40 45
Ala Ser Leu Phe Phe Asn
50

<210> 5905
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 5905
Ser Phe Thr Phe Leu Ser Phe Phe Phe Leu Arg Glu Asp Met Ile Ala
1 5 10 15
Lys Pro Asp Ile Lys Val Thr Pro Ala Asn Gly Ser Asp Leu Ser Ala
20 25 30
Phe Pro Ala Ser Gly Arg Asp Leu Ile Val Leu Phe Ser Glu Leu
35 40 45

<210> 5906
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 5906

Ile	Ser	Met	Ser	Gln	Phe	Lys	Lys	Ser	Gly	Leu	Asp	Lys	Ser	Ser	Ala
1				5					10					15	
Thr	Val	Ile	Ala	Glu	Thr	Ser	Lys	His	Arg	Ser	Ser	Leu	Lys	Asn	Thr
			20					25					30		
Pro	Ser	Thr	Ser	Asn	Asn	Ile	Ala	Phe	Met	Pro	Tyr	Pro	Phe	His	Phe
		35					40					45			
Arg	Lys	Phe													
	50														

<210> 5907

<211> 46

<212> PRT

<213> S.epidermidis

<400> 5907

Phe	Phe	Thr	Phe	Phe	Leu	Leu	Trp	Phe	Ala	Ile	Lys	Lys	Ser	Ile	Lys
1				5					10					15	
Asn	Lys	Thr	Ala	Thr	Ser	Ile	Ala	Thr	Ile	Lys	Pro	Ile	Thr	Val	Gly
			20					25					30		
Glu	Glu	Lys	Ser	Ile	Lys	Thr	Thr	Leu	Leu	Tyr	Gln	Phe	Gln		
		35					40					45			

<210> 5908

<211> 208

<212> PRT

<213> S.epidermidis

<400> 5908

Lys	Ser	Thr	Phe	Lys	Ile	Trp	Tyr	Thr	Ile	Ser	Asn	Phe	Arg	Arg	Tyr
1				5					10					15	
Leu	Met	His	Phe	Asn	Lys	Tyr	Gln	Ile	Leu	Thr	Thr	Asp	Lys	Tyr	Thr
			20					25					30		
Lys	Phe	Glu	His	Leu	Tyr	Lys	Lys	Val	Lys	His	Ile	Cys	Val	Val	Ile
		35					40					45			
Phe	Leu	Val	Val	Phe	Leu	Ile	Gly	Phe	Ile	Ile	Leu	Leu	Ser	Leu	Val
	50					55					60				
Leu	Tyr	Phe	Gln	Gln	Leu	Thr	Lys	Asp	Ala	Ser	Ser	Ile	Ser	Asp	Arg
65					70				75					80	
Glu	Leu	Lys	Ala	Lys	Ile	Leu	His	Ile	Pro	Gly	Asp	Glu	Leu	Ile	Asn
				85					90					95	
His	Asn	Asn	Gln	Ile	Leu	Glu	Glu	Tyr	Asp	His	Ser	Gln	Asn	Thr	Leu
			100					105					110		
Ile	Val	Gly	Pro	Asn	His	Val	Asn	Ser	Asn	Ile	Ile	His	Ala	Leu	Thr
		115					120					125			
Ala	Ser	Glu	Asp	Thr	Leu	Phe	Tyr	Lys	His	Asn	Gly	Ile	Met	Pro	Lys
	130					135					140				
Ala	Leu	Leu	Arg	Ala	Met	Leu	Gln	Asp	Ile	Thr	Asn	Ser	Asn	Gln	Ser
145					150				155					160	
Ser	Gly	Gly	Ser	Thr	Ile	Thr	Gln	Gln	Leu	Val	Lys	Asn	Gln	Val	Leu
				165				170						175	
Ser	Asn	Lys	Lys	Leu	Ile	Val	Val	Lys	Gln	Met	Lys	Leu	Ser	Trp	Leu
			180					185					190		
His	Gly	Ser	Lys	Ile	Tyr	Tyr	Gln	Lys	Met	Lys	Ser	Tyr	Ile	Arg	Ile
		195					200								

<210> 5909
 <211> 48
 <212> PRT
 <213> S.epidermidis

<400> 5909
 Leu Leu Tyr Pro Leu Ile Phe Tyr Ile Phe Gln Ile Ala Phe Ser Lys
 1 5 10 15
 Glu Phe Leu Ser Ala Phe Phe Tyr Leu Trp Gln Leu Phe Ile Arg Gln
 20 25 30
 Asp Ala Cys Asp Ile Thr Tyr Gly His Arg His Leu Phe Val Tyr Ser
 35 40 45

<210> 5910
 <211> 212
 <212> PRT
 <213> S.epidermidis

<400> 5910
 Met Ser Met Phe Thr Gly Ile Ile Glu Glu Ile Gly Thr Val Gln Gln
 1 5 10 15
 Val Arg Ser Glu Gln Ser Val Arg Thr Leu Glu Ile Lys Ala Gln Asn
 20 25 30
 Ile Leu Val Asp Met His Ile Gly Asp Ser Ile Ser Val Asn Gly Ala
 35 40 45
 Cys Leu Thr Val Ile Asp Phe Thr Asp Ser Ser Phe Ser Val Gln Val
 50 55 60
 Ile Lys Gly Thr Glu Asn Lys Thr Tyr Leu Gly Ser Val Gln Arg Asn
 65 70 75 80
 Thr Glu Val Asn Leu Glu Arg Ala Met Ser Gly Ser Gly Arg Phe Gly
 85 90 95
 Gly His Phe Val Leu Gly His Val Asp Glu Leu Gly Thr Ile Ser Lys
 100 105 110
 Ile Asn Glu Thr Ala Asn Ser Lys Ile Ile Ser Ile Lys Thr Thr Lys
 115 120 125
 Asn Ile Leu Asn Gln Met Val Lys Gln Gly Ser Ile Thr Val Asp Gly
 130 135 140
 Val Ser Leu Thr Val Phe Asp Leu His Asp Tyr Thr Phe Asp Ile His
 145 150 155 160
 Leu Ile Pro Glu Thr Arg Arg Ser Thr Ile Leu Ser Ser Lys Lys Val
 165 170 175
 Gly Asp Lys Val His Leu Glu Ser Asp Val Leu Phe Lys Tyr Val Glu
 180 185 190
 Asn Ile Met Asn Gln Asn Gln Ser Gln Leu Thr Glu Glu Lys Leu Arg
 195 200 205
 Ala Phe Gly Phe
 210

<210> 5911
 <211> 567
 <212> PRT
 <213> S.epidermidis

<400> 5911
 Ser Leu Met Leu Lys Phe His Leu Arg Leu Leu Leu Leu Ile Ser Thr
 1 5 10 15

Ile	Thr	Ile	Ile	Ser	Phe	Ile	Gly	Leu	Gly	Ala	Ile	Ile	His	Asn	Thr
			20					25					30		
Ile	Tyr	Gln	Thr	Leu	Thr	Ser	Asn	Gln	Ile	Lys	Ser	Leu	Asp	Ser	Glu
		35					40					45			
Ala	Arg	Asn	Tyr	Val	Asn	Leu	Phe	Asn	Asn	Asn	Lys	Glu	Lys	Glu	Ile
	50					55					60				
Thr	Asn	Ile	Ala	His	Asn	Glu	Lys	Asn	Ile	Ile	Leu	Ile	Lys	Glu	Lys
65					70					75					80
Asp	Lys	Asp	Lys	Ile	Ile	Tyr	Ser	Ser	Gly	Asn	Ile	Lys	Asp	Ile	Asp
				85					90					95	
His	Arg	Ile	Asp	Asn	Glu	Ala	Asn	Pro	Ser	Lys	Leu	Ile	Asn	Lys	Asn
			100					105					110		
Thr	Lys	Leu	Gly	Met	Arg	Tyr	Thr	Tyr	Lys	Asn	Thr	Ile	Asp	Asp	Lys
		115					120					125			
Thr	Ile	Tyr	Ile	Ser	Gly	Ile	Asn	Asn	Glu	Ile	Ile	Asp	Leu	Gln	Lys
	130					135					140				
Asp	Leu	Trp	Lys	Tyr	Leu	Ser	Ile	Val	Gly	Val	Ile	Val	Leu	Phe	Thr
145					150					155					160
Val	Tyr	Leu	Ala	Ser	Arg	Ser	Ile	Asn	Arg	Thr	Tyr	Ile	Arg	Pro	Ile
				165					170					175	
Asn	Glu	Val	Thr	Tyr	Ala	Thr	Ser	Leu	Leu	Ala	Asp	Gly	Tyr	Tyr	His
			180					185					190		
Val	Arg	Val	Pro	Glu	Ser	Asn	Val	Lys	Glu	Thr	Arg	Ala	Leu	Phe	Val
	195						200					205			
Thr	Thr	Asn	Asp	Leu	Ala	Arg	Arg	Leu	Gln	Lys	Leu	Asn	Asn	Ser	Gln
	210					215					220				
Lys	Ile	Gln	Ser	Asn	Arg	Leu	Lys	Thr	Thr	Leu	Glu	Asn	Ile	Pro	Ser
225					230					235					240
Ser	Val	Leu	Met	Ile	Asp	Lys	His	Gly	Glu	Ile	Val	Val	Ala	Asn	His
				245					250					255	
Ala	Tyr	Tyr	Gln	Val	Phe	Asn	Pro	Asp	Gln	Met	Val	Glu	Asn	Lys	Ser
			260					265					270		
Tyr	Ile	Gly	Phe	Ile	Asp	Asp	Ser	Ile	Glu	Lys	Leu	Ile	Ile	Glu	Ser
		275					280						285		
Phe	Arg	Thr	Glu	Lys	Val	Ile	Tyr	Glu	Gln	Leu	Glu	Val	Ala	Ile	Asn
	290					295					300				
Asn	Val	His	Thr	Lys	Tyr	Phe	Asp	Val	Ser	Cys	Ile	Pro	Ile	Leu	Thr
305					310					315					320
Lys	Ser	Lys	Lys	Asn	Leu	Gln	Gly	Met	Val	Val	Val	Leu	His	Asp	Ile
				325					330					335	
Thr	Asn	Leu	Gln	Lys	Leu	Glu	Asn	Leu	Arg	Arg	Glu	Phe	Val	Ala	Asn
		340						345					350		
Val	Ser	His	Glu	Leu	Lys	Thr	Pro	Ile	Thr	Ser	Ile	Lys	Gly	Phe	Ala
	355						360					365			
Glu	Thr	Leu	Ile	Glu	Gly	Ala	Lys	Asn	Asp	Glu	Gln	Ser	Leu	Asp	Met
	370					375					380				
Phe	Leu	Asn	Ile	Ile	Leu	Lys	Glu	Ser	Asn	Arg	Ile	Glu	Ser	Leu	Val
385					390					395					400
Thr	Asp	Leu	Leu	Asp	Leu	Ser	His	Ile	Glu	Gln	Lys	Glu	Leu	Glu	
				405					410					415	
Ile	Asn	Tyr	Met	Asn	Leu	Ser	Glu	Leu	Ala	Ile	Asn	Ile	Ile	Asp	Asn
			420						425					430	
Leu	Gln	Thr	Gln	Ala	Tyr	Asn	Lys	Arg	Ile	Lys	Ile	Gln	Ser	Glu	Ile
		435					440					445			
Glu	Lys	Asp	Val	Ile	Ile	Glu	Ala	His	Glu	Asn	Lys	Ile	Ala	Gln	Val
	450					455					460				

Ile Thr Asn Leu Leu Ser Asn Ala Ile Asn Tyr Ser Ser Glu Asp Asn
 465 470 475 480
 Lys Val Ile Val Arg Val Tyr Arg Asn Asp Asn Lys Val Tyr Leu Glu
 485 490 495
 Ile Gln Asp Tyr Gly Ile Gly Ile Ser Glu Thr Asp Gln Lys Arg Ile
 500 505 510
 Phe Glu Arg Phe Tyr Arg Val Asp Lys Ala Arg Ser Arg Asp Ser Gly
 515 520 525
 Gly Thr Gly Leu Gly Leu Ser Ile Thr Lys His Ile Val Glu Ala His
 530 535 540
 Asn Gly Arg Ile Asp Val Lys Ser Ala Pro Gly Lys Gly Ser Ile Phe
 545 550 555 560
 Lys Val Leu Phe Asn Asp Asn
 565

<210> 5912

<211> 102

<212> PRT

<213> S.epidermidis

<400> 5912

Ser Thr Ala Leu Asp Leu Glu Lys Met Ile Pro Thr Thr Lys Ile Thr
 1 5 10 15
 Val Asn Arg Ala Asn Ile Ile Pro Lys Ile Arg Phe Ala Val Lys Lys
 20 25 30
 Glu Lys Ile Glu Ser Ala Ala Asp Arg Ile Val Lys Thr Ile Asn Pro
 35 40 45
 Ile Leu Lys Asn Phe Cys Leu Phe Phe Cys Val Cys Ser Ser Ser
 50 55 60
 Lys Val Ser Phe Asn Phe Ser Tyr Lys Phe Ser Phe Ser Cys Asn Ser
 65 70 75 80
 Lys Thr Cys Cys Val Tyr Ser Phe Phe Phe Ser Lys Val Ser Ser Gly
 85 90 95
 Thr Ser Ser Phe Ser Thr
 100

<210> 5913

<211> 246

<212> PRT

<213> S.epidermidis

<400> 5913

Pro Phe Thr Phe Arg Arg Arg Asn Asp Met Thr Lys Leu Asn Val Lys
 1 5 10 15
 Val Phe Ala Asp Gly Ala Asp Ile Glu Glu Met Lys Ser Ala Tyr Lys
 20 25 30
 Asn Gln Leu Val Asp Gly Phe Thr Asn Pro Ser Leu Met Ala Lys
 35 40 45
 Ala Gly Val Thr Asp Tyr Lys Ala Phe Ala Glu Glu Val Val Ser Glu
 50 55 60
 Ile Pro Asp Ala Ser Ile Ser Phe Glu Val Phe Ala Asp Asp Leu Pro
 65 70 75 80
 Thr Met Glu Lys Glu Ala Glu Ile Leu Lys Gln Tyr Gly Asp Asn Val
 85 90 95
 Phe Val Lys Ile Pro Ile Val Thr Thr Thr Gly Glu Ser Thr Leu Pro
 100 105 110

Leu Ile Lys Arg Leu Ser Ser Lys Gln Val Arg Leu Asn Val Thr Ala
 115 120 125
 Val Tyr Thr Ile Glu Gln Val Lys Ala Ile Thr Asp Ala Val Thr Glu
 130 135 140
 Gly Val Pro Thr Tyr Val Ser Val Phe Ala Gly Arg Ile Ala Asp Thr
 145 150 155 160
 Gly Val Asp Pro Leu Pro Leu Met Lys Glu Ser Val Lys Val Thr His
 165 170 175
 Ser Lys Glu Gly Val Gln Leu Leu Trp Ala Ser Cys Arg Glu Val Tyr
 180 185 190
 Asn Val Ile Gln Ala Asp Glu Ile Gly Ala Asp Ile Ile Thr Cys Pro
 195 200 205
 Ala Asp Val Val Lys Lys Val Asn Asn Asn Leu Gly Arg Asp Ile Gly
 210 215 220
 Glu Leu Ser Val Asp Thr Val Lys Gly Phe Ala Lys Asp Ile Gln Ser
 225 230 235 240
 Ser Gly Leu Ser Ile Leu
 245

<210> 5914
 <211> 58
 <212> PRT
 <213> S.epidermidis

<400> 5914
 Val Ser Leu Pro Tyr Ile Tyr Ser Val Asn Leu Thr Tyr Tyr Ile Leu
 1 5 10 15
 Leu Ile Lys Val Ser Leu Tyr Tyr Tyr Asn Ser Ser Asn Ile Ser Ser
 20 25 30
 Thr Ala Phe Leu Pro Cys Cys Met Gln Ser Gly Lys Pro Thr Ala Ser
 35 40 45
 Asn Gly Ala Pro Val Thr Arg Asn Leu Gly
 50 55

<210> 5915
 <211> 82
 <212> PRT
 <213> S.epidermidis

<400> 5915
 Asn Asn Thr Pro Ile Ala Ile Lys Ile Thr Thr Asn Ile Ala Asn Met
 1 5 10 15
 Ile Asn Asn Thr Ile Tyr Phe Ser Ser Tyr Phe Ile Ile Leu His Tyr
 20 25 30
 Asn Val Ile Leu Cys Val Val Lys Ser Gln Asn Gln Leu Ile Asp Arg
 35 40 45
 Leu Phe Leu Lys Asp Tyr Thr Lys Leu Lys Ile Val Val Thr Arg Tyr
 50 55 60
 Asp Asp Asp Lys Glu Tyr Ser Asn Lys Leu Gln Thr Asp Ile Lys Thr
 65 70 75 80
 Thr Cys

<210> 5916
 <211> 46
 <212> PRT

Ala Leu Lys Ala Tyr Arg Asn Ile
165

<210> 5920

<211> 382

<212> PRT

<213> S.epidermidis

<400> 5920

Gly	His	Val	Thr	Ile	Arg	Leu	Glu	Val	Asp	Asn	Met	Lys	Ile	Gly	Ile
1				5					10					15	
Pro	Lys	Glu	Ile	Lys	Asn	Asn	Glu	Asn	Arg	Val	Gly	Leu	Ser	Pro	Ser
			20					25				30			
Gly	Val	His	Ala	Leu	Val	Asp	Gln	Gly	His	Glu	Val	Leu	Val	Glu	Thr
		35					40					45			
Asn	Ala	Gly	Leu	Gly	Ser	Tyr	Phe	Glu	Asp	Gly	Asp	Tyr	Gln	Glu	Ala
	50					55					60				
Gly	Ala	Lys	Ile	Val	Asp	Glu	Gln	Ser	Lys	Ala	Trp	Asp	Val	Asp	Met
65					70					75				80	
Val	Ile	Lys	Val	Lys	Glu	Pro	Leu	Glu	Ser	Glu	Tyr	Lys	Phe	Phe	Lys
				85					90					95	
Glu	Glu	Leu	Ile	Leu	Phe	Thr	Tyr	Leu	His	Leu	Ala	Asn	Glu	Gln	Lys
			100					105					110		
Leu	Thr	Gln	Ala	Leu	Val	Asp	Asn	Lys	Val	Ile	Ser	Ile	Ala	Tyr	Glu
		115					120					125			
Thr	Val	Gln	Leu	Pro	Asp	Gly	Ser	Leu	Pro	Leu	Leu	Thr	Pro	Met	Ser
	130					135					140				
Glu	Val	Ala	Gly	Arg	Met	Ser	Thr	Gln	Val	Gly	Ala	Glu	Phe	Leu	Gln
145					150					155					160
Arg	Phe	Asn	Gly	Gly	Met	Gly	Ile	Leu	Leu	Gly	Gly	Ile	Pro	Gly	Val
			165					170						175	
Pro	Lys	Gly	Lys	Val	Thr	Ile	Ile	Gly	Gly	Gly	Gln	Ala	Gly	Thr	Asn
			180					185					190		
Ala	Ala	Lys	Ile	Ala	Leu	Gly	Leu	Gly	Ala	Glu	Val	Thr	Ile	Leu	Asp
		195					200					205			
Val	Asn	Pro	Lys	Arg	Leu	Glu	Glu	Leu	Glu	Asp	Leu	Phe	Asp	Gly	Arg
	210					215					220				
Val	Arg	Thr	Ile	Met	Ser	Asn	Pro	Leu	Asn	Ile	Glu	Met	Tyr	Val	Lys
225					230					235				240	
Glu	Ser	Asp	Leu	Val	Ile	Gly	Ala	Val	Leu	Ile	Pro	Gly	Ala	Lys	Ala
			245						250					255	
Pro	Asn	Leu	Val	Thr	Glu	Asp	Met	Ile	Lys	Glu	Met	Lys	Asp	Gly	Ser
		260						265					270		
Val	Ile	Val	Asp	Ile	Ala	Ile	Asp	Gln	Gly	Gly	Ile	Phe	Glu	Thr	Thr
	275						280					285			
Asp	Lys	Ile	Thr	Thr	His	Asp	Asn	Pro	Thr	Tyr	Thr	Lys	His	Gly	Val
290						295					300				
Val	His	Tyr	Ala	Val	Ala	Asn	Met	Pro	Gly	Ala	Val	Pro	Arg	Thr	Ser
305					310					315					320
Thr	Ile	Gly	Leu	Asn	Asn	Ala	Thr	Leu	Pro	Tyr	Ala	Gln	Leu	Leu	Ala
			325						330					335	
Asn	Lys	Gly	Tyr	Arg	Glu	Ala	Phe	Lys	Val	Asn	His	Pro	Leu	Ser	Leu
		340						345					350		
Gly	Leu	Asn	Thr	Phe	Asn	Gly	His	Val	Thr	Asn	Lys	Asn	Val	Ala	Asp
		355					360					365			
Thr	Phe	Asn	Phe	Glu	Tyr	Thr	Ser	Ile	Glu	Asp	Ala	Leu	Lys		

Asp Ile Val His Lys Asn Asn Gln Phe Met Leu Lys Tyr Asn Asp Thr
 385 390 395 400
 Thr Gln Asn Tyr Glu Leu Phe Asp Ile Val Ile Asn Ala Thr Gly Ser
 405 410 415
 Lys Thr His Leu Ser Gln Leu Asp Glu Asp Asp Gln Leu Ile Leu Asn
 420 425 430
 Leu Glu Asn Arg Gln Ile Val Gln Arg His Pro Met Gly Gly Ile Gln
 435 440 445
 Ile Ile Pro Glu Thr Asn Gln Val Ile Ser Pro Arg Tyr Gly Thr Leu
 450 455 460
 Lys Asn Val Ile Ala Ile Gly Gln Met Thr Asn Gly Val Asn Lys Leu
 465 470 475 480
 Arg Asn Gly Val Lys Met Ile Val Asn Gln Val Val Asp Thr Val Ser
 485 490 495
 Gln Leu Tyr Ile Thr Gln Glu Asn Arg Asn Lys
 500 505

<210> 5922

<211> 61

<212> PRT

<213> S.epidermidis

<400> 5922

Lys Arg His Thr Lys Ala Ser Val Gln Lys Leu Asn Asn Cys Phe Ser
 1 5 10 15
 Gln Ala Phe Lys Asp Ala Leu Asn Glu Glu Ile Ile Glu Arg Asp Gln
 20 25 30
 Thr Trp Asn Asp Pro Ile Tyr Glu Arg Lys Pro Thr Lys Lys Glu Glu
 35 40 45
 Asp Lys Phe Met Ser Leu Thr Glu Tyr Arg Lys Leu Lys
 50 55 60

<210> 5923

<211> 61

<212> PRT

<213> S.epidermidis

<400> 5923

Ile Asn Ser Thr Ile His Leu Arg Ser Thr Met Thr Lys Ser Ala Asn
 1 5 10 15
 Lys Ile Ile Ser Ile Ala Ile Lys Asp Met Lys His Ile Gln Asn Val
 20 25 30
 Leu Asn Arg Leu Leu Gln Ile Ser Ala Lys Ile Lys Asn Ile Pro Phe
 35 40 45
 Ser Lys Met Val Lys Ile Leu Ile Ser Thr Ser Thr Lys
 50 55 60

<210> 5924

<211> 220

<212> PRT

<213> S.epidermidis

<400> 5924

Ala Cys Asn Thr Leu Phe Cys Phe Phe Ile Thr Thr Lys Lys Lys Lys
 1 5 10 15
 Glu Glu Ser His Met Ala Arg Phe Arg Gly Ser Asn Trp Lys Lys Ser

```

      20      25      30
Arg Arg Leu Gly Ile Ser Leu Ser Gly Thr Gly Lys Glu Leu Glu Lys
      35      40      45
Arg Pro Tyr Ala Pro Gly Gln His Gly Pro Asn Gln Arg Lys Lys Leu
      50      55      60
Ser Glu Tyr Gly Leu Gln Leu Arg Glu Lys Gln Lys Leu Arg Tyr Leu
      65      70      75      80
Tyr Gly Met Thr Glu Arg Gln Phe Arg Asn Thr Phe Asp Ile Ala Gly
      85      90      95
Lys Gln Tyr Gly Val His Gly Glu Asn Phe Met Ile Leu Leu Ala Ser
      100      105      110
Arg Leu Asp Ala Val Val Tyr Ser Leu Gly Leu Ala Arg Thr Arg Arg
      115      120      125
Gln Ala Arg Gln Leu Val Asn His Gly His Ile Glu Val Asp Gly Gly
      130      135      140
Arg Val Asp Ile Pro Ser Tyr Ser Leu Lys Pro Gly Gln Val Ile Thr
      145      150      155      160
Val Arg Glu Lys Ser Gln Asn Leu Asp Ile Ile Lys Glu Ser Val Glu
      165      170      175
Ile Asn Asn Phe Val Pro Glu Tyr Leu Asp Phe Asp Ala Asp Asn Leu
      180      185      190
Lys Gly Thr Phe Val Arg Phe Pro Glu Arg Ser Glu Leu Pro Ala Glu
      195      200      205
Ile Asn Glu Gln Leu Ile Val Glu Tyr Tyr Ser Arg
      210      215      220

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<210> 5925

<211> 45

<212> PRT

<213> S.epidermidis

<400> 5925

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Ile Lys Leu Thr Arg Tyr Leu Met His Lys Asp Tyr Asn Met Thr Gln
1      5      10      15
Leu Thr Leu Pro Lys Glu Thr Ser Val His Ile Pro Thr His Asp Met
      20      25      30
Ser Gln Tyr Val Asn Asp Ile Val Lys Asn Ser Arg Tyr
      35      40      45

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<210> 5926

<211> 58

<212> PRT

<213> S.epidermidis

<400> 5926

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Thr Lys Leu Thr Arg Cys Leu Met Tyr Lys Asp Tyr Asn Met Thr Gln
1      5      10      15
His Thr Leu Leu Met Glu Thr Ser Val Leu Ile Pro Ala Asn Asp Ile
      20      25      30
Ser Arg His Val Asn Asp Ile Ala Glu Thr Ile Pro Asp Thr Glu Phe
      35      40      45
Asp Glu Phe Arg His His Arg Gly Leu Ile
      50      55

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<210> 5927

<211> 58

<212> PRT

<213> S.epidermidis

<400> 5927

Thr	Lys	Leu	Thr	Arg	Cys	Leu	Met	Tyr	Lys	Asp	Tyr	Asn	Met	Thr	Gln
1				5					10				15		
His	Thr	Leu	Leu	Met	Glu	Thr	Ser	Ala	Leu	Ile	Pro	Ala	Asn	Asp	Ile
		20					25					30			
Ser	Arg	His	Val	Asn	Asp	Ile	Ala	Glu	Thr	Ile	Pro	Asp	Thr	Glu	Phe
	35					40					45				
Asp	Glu	Phe	Arg	His	Tyr	Arg	Cys	Leu	Ile						
	50				55										

<210> 5928

<211> 55

<212> PRT

<213> S.epidermidis

<400> 5928

Thr	Lys	Leu	Thr	Arg	Cys	Leu	Met	Tyr	Lys	Asp	Tyr	Asn	Met	Thr	Gln
1				5					10				15		
His	Thr	Leu	Leu	Met	Glu	Thr	Ser	Val	Leu	Ile	Pro	Thr	Asn	Asp	Ile
		20					25					30			
Ser	Arg	His	Val	Asn	Asp	Ile	Ala	Glu	Thr	Ile	Pro	Asp	Thr	Glu	Phe
	35					40					45				
Arg	Tyr	His	Arg	Gly	Leu	Ile									
	50				55										

<210> 5929

<211> 207

<212> PRT

<213> S.epidermidis

<400> 5929

Met	Phe	Glu	Thr	Ile	Thr	Thr	Ala	Ala	Ile	Leu	Tyr	Ile	Ala	Thr	Ala
1				5					10				15		
Val	Asp	Leu	Leu	Val	Ile	Leu	Leu	Ile	Phe	Phe	Ala	Arg	Ala	Asn	Asn
		20					25					30			
Tyr	Gln	Gln	Tyr	Lys	Asp	Ile	Tyr	Ile	Gly	Gln	Tyr	Leu	Gly	Ser	Leu
	35					40					45				
Thr	Leu	Ile	Phe	Val	Ser	Leu	Phe	Phe	Ala	Tyr	Val	Leu	Asn	Tyr	Val
	50				55					60					
Pro	Asp	Lys	Trp	Ile	Leu	Gly	Leu	Leu	Gly	Leu	Ile	Pro	Ile	Tyr	Leu
65				70					75				80		
Gly	Ile	Lys	Val	Ala	Ile	Phe	Asp	Asp	Cys	Glu	Gly	Glu	Arg	Arg	Ala
			85					90					95		
Lys	Asp	Glu	Leu	Asn	Lys	Lys	Gly	Leu	Ser	Glu	Leu	Ser	Lys	Ser	Val
		100					105					110			
Ala	Val	Val	Thr	Leu	Ala	Ser	Cys	Gly	Ala	Asp	Asn	Ile	Gly	Leu	Phe
		115					120					125			
Val	Pro	Tyr	Phe	Thr	Thr	Ile	Asn	Asn	Tyr	Glu	Leu	Val	Ile	Thr	Leu
	130					135					140				
Ile	Thr	Phe	Val	Ile	Leu	Ile	Phe	Ile	Leu	Val	Phe	Thr	Ala	Gln	Lys
145				150					155					160	
Leu	Ala	Asn	Ile	Pro	Gly	Leu	Gly	Glu	Val	Ile	Glu	Arg	Phe	Ser	Arg
			165					170						175	

Trp Ile Met Ser Ile Val Tyr Ile Gly Leu Gly Leu Phe Ile Ile Ile
 180 185 190
 Glu Asn Gly Thr Val Gln Lys Leu Phe His Phe Val Phe Leu Val
 195 200 205

<210> 5930
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 5930
 Ile Cys Glu Thr Leu Ser Ile Asn Thr Ile Tyr Leu Pro Phe Ser Leu
 1 5 10 15
 Glu Leu Phe Tyr Pro Asp Thr Arg Asn Cys Asn Asn Thr His Phe Leu
 20 25 30
 Lys His Ile Leu His Leu Asn Ile Phe Ser Ile Lys Ile Lys Glu Tyr
 35 40 45
 Ile Arg Phe
 50

<210> 5931
 <211> 76
 <212> PRT
 <213> S.epidermidis

<400> 5931
 Lys Gly Gly Thr Phe Met Asp Tyr Ala His Leu Asn Leu Glu His Phe
 1 5 10 15
 Phe Ala Arg Asn Asp Asp Leu Asp Ile Ile Arg Asp Arg Ser Asp Phe
 20 25 30
 Val Met Ile Asn Asn Phe Thr Asn Glu Met Lys Tyr Arg Glu Gly Glu
 35 40 45
 Ile Glu Gly Thr Ile Asp Leu Asn Gln Tyr Tyr Tyr Lys Asn Arg Ser
 50 55 60
 Gln Ala Val Ser Phe Ile Met Met Asn Tyr Lys Asn
 65 70 75

<210> 5932
 <211> 160
 <212> PRT
 <213> S.epidermidis

<400> 5932
 Arg Gly Met Thr Met Thr Lys Asn Ile Pro Thr Asn Tyr Lys Leu Ile
 1 5 10 15
 Ser Lys Gln Leu Ala Ser Leu Ile Glu Asp Glu Lys Asn Leu Ile Ala
 20 25 30
 Ile Leu Ser Asn Thr Ser Ala Leu Leu Asn Asp Thr Ile Asp Gln Ile
 35 40 45
 Asn Trp Val Gly Phe Tyr Leu Ile Glu Asn Asn Glu Leu Ile Leu Gly
 50 55 60
 Pro Phe Gln Gly His Pro Ala Cys Val His Ile Ala Ile Gly Lys Gly
 65 70 75 80
 Val Cys Gly Thr Ala Val Ser Ser Gly Glu Thr Gln Arg Val Lys Asp
 85 90 95
 Val His Gln Phe Pro Gly His Ile Ala Cys Asp Ala Asn Ser Gln Ser

<212> PRT

<213> S.epidermidis

<400> 5937

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Asn Glu Gln Ala Glu Tyr Thr Ile Met Lys Leu Glu Arg Ile Leu Pro
1      5      10      15
Phe Ser Lys Ser Leu Ile Asp Ser His Ile Asn His Asn Ser Ile Val
      20      25      30
Ile Asp Ala Thr Cys Gly Asn Gly Asn Asp Thr Ala Tyr Phe Ala Gln
      35      40      45
His Val Pro Asn Gly Phe Val Tyr Gly Phe Asp Ile Gln Glu Gln Ala
      50      55      60
Ile Leu Asn Thr His Lys Lys Thr Lys Asp Tyr Ser Asn Val Lys Leu
65      70      75      80
Ile Gln Ser Gly His Glu Asn Ala Lys Leu His Ile Pro Ala Gln His
      85      90      95
His Gly Cys Ile Asp Ala Ala Ile Phe Asn Leu Gly Tyr Leu Pro Lys
      100     105     110
Gly Asn Lys Glu Ile Val Thr Lys Pro Glu Thr Thr Ile Met Ala Ile
      115     120     125
Asn Glu Ile Phe Asp Ile Leu Ser Ile Glu Gly Ile Ile Ile Leu Val
      130     135     140
Ile Tyr His Gly His Glu Glu Gly Lys Val Glu Lys Glu Ala Leu Leu
145     150     155     160
Glu Phe Leu Gln Asn Phe Asp Gln Asn Lys Ala His Ile Leu Gln Tyr
      165     170     175
Gln Phe Ile Asn Gln Lys Asn Asn Ala Pro Phe Ile Cys Ala Ile Asp
      180     185     190
Lys Arg Asn
      195

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<210> 5938

<211> 168

<212> PRT

<213> S.epidermidis

<400> 5938

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Ala Met Tyr Leu Tyr Thr Ser Tyr Gly Thr Tyr Gln Phe Leu Asn Gln
1      5      10      15
Ile Lys Leu Asn His Gln Glu Arg Asn Leu Phe Gln Phe Ser Thr Asn
      20      25      30
Asp Ser Ser Ile Ile Leu Glu Glu Ser Glu Gly Lys Ser Ile Leu Lys
      35      40      45
His Pro Ser Ala Tyr Gln Val Ile Asp Ser Thr Gly Glu Phe Ser Glu
      50      55      60
His His Phe Tyr Ser Ala Ile Phe Val Pro Thr Ser Glu Asp His Arg
65      70      75      80
Gln Gln Leu Glu Lys Lys Leu Leu His Val Asp Val Pro Leu Ser Asn
      85      90      95
Phe Gly Gly Phe Lys Ser Tyr Arg Leu Leu Lys Pro Thr Glu Gly Ser
      100     105     110
Thr Tyr Lys Ile Tyr Phe Gly Phe Ala Asn Arg Thr Ala Tyr Glu Asp
      115     120     125
Phe Lys Ala Ser Asp Ile Phe Asn Glu Asn Phe Ser Lys Asp Ala Leu
      130     135     140
Ser Gln Tyr Phe Gly Ala Ser Gly Gln His Ser Ser Tyr Phe Glu Arg

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<210> 5939
<211> 55
<212> PRT
<213> S.epidermidis
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<210> 5940
<211> 375
<212> PRT
<213> S.epidermidis
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<400> 5940															
Gly 1	Met	Lys	Ala	Ile 5	Leu	Phe	Asp	Val	Asp 10	Gly	Val	Phe	Leu	Ser 15	Glu
Glu	Arg	Cys	Phe 20	Asp	Val	Ser	Ala	Ile 25	Thr	Val	Ala	Glu	Leu 30	Leu	Ser
Ser	Pro	Asp 35	Phe	Leu	Asn	Cys	Asp 40	Ile	Asp	Ile	His	Phe	Asp 45	Gly	Asn
Leu	Thr 50	Glu	Asn	Asp	Ile	Asn 55	Lys	Ile	Arg	Arg	Asn 60	Val	Phe	Asn	Asn
Asp 65	Arg	Ile	Leu	Asn 70	Gln	Leu	Lys	Ser	Leu	Gly 75	Leu	Asn	Ser	Asn	Trp 80
Asp	Met	Leu	Phe 85	Ile	Val	Phe	Ser	Ile	His 90	Leu	Ile	Asp	Lys	Ala 95	Lys
Gln	Leu	Lys	Pro 100	Ser	Leu	Arg	Asp	Gln 105	Leu	Leu	Asp	Glu	Leu 110	Leu	Phe
Thr	Lys	Glu 115	Thr	Leu	Lys	Glu	Ile 120	Ala	Lys	Asp	Leu	Thr 125	Asp	Lys	Thr
Ile	Asn 130	Tyr	Ser	Leu	Pro	Tyr 135	Asp	Val	Ile	Ala	Ser 140	Phe	Arg	Asn	Gly
Lys 145	Asp	Ala	Ile	Tyr 150	Glu	Asp	Leu	Glu	Val	Tyr 155	Ala	Lys	Asn	Gln	Leu 160
Glu	Leu	Asn	Asn 165	Thr	Ser	Leu	Phe	Lys	Leu 170	Lys	Ser	Ala	Leu 175	Trp	Thr
Leu	Ala	Lys	Asp 180	Ile	Tyr	Gln	Glu	Trp 185	Tyr	Leu	Gly	Lys	Ala 190	Leu	Phe
Asn	Gln	Val 195	Glu	Tyr	Lys	Lys	Asp 200	Ile	Gln	Asp	Phe	Lys 205	Lys	Gly	Phe
Ile	Tyr 210	Asp	Glu	Val	Ile	Leu 215	Lys	Pro	Ile	Glu	Glu 220	Ile	Gln	Leu	Leu
Leu 225	Gln	Asn	Leu	Ile 230	Glu	Ala	Gly	Tyr	Gln	Ile 235	Ala	Ile	Ala	Thr	Gly 240
Arg	Pro	Arg	Thr	Glu	Thr	Ile	Ile	Pro	Phe	Gln	Ser	Leu	Gly	Leu	Lys

2551

				245					250					255			
Ser	Tyr	Phe	Lys	Asp	Glu	His	Ile	Val	Thr	Ala	Ser	Glu	Val	Leu	Leu		
			260					265					270				
Ala	Glu	Lys	Gln	Phe	Pro	Gln	Tyr	Gln	Pro	Leu	Gly	Lys	Pro	Asn	Pro		
		275					280					285					
Phe	Ser	Tyr	Ile	Ala	Thr	Leu	Asn	Gly	Asn	Tyr	Asn	Asp	Gln	Tyr	Glu		
	290					295					300						
Arg	Tyr	Ala	Thr	Lys	Gln	Glu	Asp	Ile	Val	Asn	Lys	Asp	Glu	Val	Tyr		
305					310					315					320		
Ile	Val	Gly	Asp	Ser	Leu	Ala	Asp	Leu	Leu	Ser	Ala	Lys	Lys	Ile	Gly		
			325					330						335			
Ala	Thr	Phe	Ile	Gly	Thr	Leu	Thr	Gly	Leu	Lys	Gly	Lys	Ala	Ala	His		
		340						345					350				
Ser	Glu	Leu	Val	Ala	Asn	Gly	Ala	Asp	His	Val	Val	Glu	Asp	Ile	Thr		
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Lys	Ile	Arg	Lys	Ile	Leu	Leu											
	370				375												

<210> 5941

<211> 47

<212> PRT

<213> S.epidermidis

<400> 5941

Lys	Cys	Asn	Phe	Tyr	Tyr	Asn	Ile	Lys	Lys	Arg	Ala	Lys	Ser	Leu	Thr
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Ile	Arg	Leu	Ile	Ala	Ile	Gln	Asn	Tyr	Ser	Thr	Thr	Glu	Pro	Ile	Phe
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Leu	Asn	Phe	Ser	Lys	Arg	Ser	Phe	Ala	Asn	Ser	Ser	Gly	Val	Ser	
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<210> 5942

<211> 3696

<212> PRT

<213> S.epidermidis

<400> 5942

Glu	Ala	Asn	Leu	Met	Asn	Leu	Phe	Arg	Lys	Gln	Lys	Phe	Ser	Ile	Arg
1			5					10					15		
Lys	Phe	Asn	Ile	Gly	Ile	Phe	Ser	Ala	Leu	Ile	Ala	Thr	Val	Ala	Phe
		20					25					30			
Leu	Ala	His	Pro	Gly	Gln	Ala	Thr	Ala	Ser	Glu	Leu	Glu	Pro	Ser	Gln
		35				40					45				
Asn	Asn	Asp	Thr	Thr	Ala	Gln	Ser	Asp	Gly	Gly	Leu	Glu	Asn	Thr	Ser
	50				55					60					
Gln	Ser	Asn	Pro	Ile	Ser	Glu	Glu	Thr	Thr	Asn	Thr	Leu	Ser	Gly	Gln
65				70					75					80	
Thr	Val	Pro	Ser	Ser	Thr	Glu	Asn	Lys	Gln	Thr	Gln	Asn	Val	Pro	Asn
			85					90					95		
His	Asn	Ala	Gln	Pro	Ile	Ala	Ile	Asn	Thr	Glu	Glu	Ala	Glu	Ser	Ala
		100						105					110		
Gln	Thr	Ala	Ser	Tyr	Thr	Asn	Ile	Asn	Glu	Asn	Asn	Asp	Thr	Ser	Asp
		115				120						125			
Asp	Gly	Leu	His	Val	Asn	Gln	Pro	Ala	Lys	His	His	Ile	Glu	Ala	Gln
	130				135					140					
Ser	Glu	Asp	Val	Thr	Asn	His	Thr	Asn	Ser	Asn	His	Ser	Asn	Ser	Ser

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595					600					605					
Gln	Arg	Tyr	Ser	Gln	Thr	Gln	Ile	Asp	Asp	Leu	Leu	His	Glu	Leu	Gln
610						615					620				
Thr	Thr	Leu	Ile	Asn	Arg	Val	Ser	Ala	Ser	Arg	Glu	Ile	Asn	Asp	Lys
625					630					635					640
Ala	Gln	Glu	Met	Thr	Asp	Ala	Val	Tyr	Asp	Ser	Thr	Glu	Leu	Thr	Thr
				645					650					655	
Glu	Glu	Lys	Asp	Thr	Leu	Val	Asp	Gln	Ile	Glu	Asn	His	Lys	Asn	Glu
			660					665					670		
Ile	Ser	Asn	Asn	Ile	Asp	Asp	Glu	Leu	Thr	Asp	Asp	Gly	Val	Glu	Arg
		675					680					685			
Val	Lys	Glu	Ala	Gly	Leu	His	Thr	Leu	Glu	Ser	Asp	Thr	Pro	His	Pro
	690					695					700				
Val	Thr	Lys	Pro	Asn	Ala	Arg	Gln	Val	Val	Asn	Asn	Arg	Ala	Asp	Gln
705					710					715					720
Gln	Lys	Thr	Leu	Ile	Arg	Asn	Asn	His	Glu	Ala	Thr	Thr	Glu	Glu	Gln
				725					730					735	
Asn	Glu	Ala	Ile	Arg	Gln	Val	Glu	Ala	His	Ser	Ser	Asp	Ala	Ile	Ala
			740					745					750		
Lys	Ile	Gly	Glu	Ala	Glu	Thr	Asp	Thr	Thr	Val	Asn	Glu	Ala	Arg	Asp
	755						760					765			
Asn	Gly	Thr	Lys	Leu	Ile	Ala	Thr	Asp	Val	Pro	Asn	Pro	Thr	Lys	Lys
	770					775					780				
Ala	Glu	Ala	Arg	Ala	Ala	Val	Thr	Asn	Ser	Ala	Asn	Ser	Lys	Ile	Lys
785					790					795					800
Asp	Ile	Asn	Asn	Asn	Thr	Gln	Ala	Thr	Leu	Asp	Glu	Arg	Asn	Asp	Ala
			805						810					815	
Ile	Ala	Leu	Val	Asn	Arg	Ser	Lys	Asp	Glu	Ala	Ile	Gln	Asn	Ile	Asn
			820						825				830		
Thr	Ala	Gln	Gly	Asn	Asp	Asp	Val	Thr	Glu	Ala	Gln	Asn	Asn	Gly	Thr
	835					840					845				
Asn	Thr	Ile	Gln	Gln	Val	Pro	Leu	Thr	Pro	Val	Lys	Arg	Gln	Asn	Ala
	850					855					860				
Ile	Ala	Thr	Ile	Asn	Ala	Lys	Ala	Asp	Glu	Gln	Lys	Arg	Leu	Ile	Gln
865				870					875					880	
Ala	Asn	Asn	Asn	Ala	Thr	Thr	Glu	Glu	Lys	Ala	Asp	Ala	Glu	Arg	Lys
			885						890					895	
Val	Asn	Glu	Ala	Val	Ile	Thr	Ala	Asn	Gln	Asn	Ile	Thr	Asn	Ala	Thr
			900					905					910		
Thr	Asn	Arg	Asp	Val	Asp	Gln	Ala	Gln	Thr	Thr	Gly	Ser	Gly	Ile	Ile
	915					920					925				
Ser	Ala	Ile	Ser	Pro	Ala	Thr	Lys	Ile	Lys	Glu	Asp	Ala	Arg	Ala	Ala
	930					935					940				
Val	Glu	Ala	Lys	Ala	Ile	Ala	Gln	Asn	Gln	Gln	Ile	Asn	Ser	Asn	Asn
945				950						955					960
Met	Ala	Thr	Thr	Glu	Lys	Glu	Asp	Ala	Leu	Asn	Gln	Val	Glu	Ala	
			965					970						975	
His	Lys	Gln	Ala	Ile	Ala	Thr	Ile	Asn	Gln	Ala	Gln	Ser	Thr	Gln	
			980				985					990			
Gln	Val	Ser	Glu	Ala	Lys	Asn	Asn	Gly	Ile	Asn	Thr	Ile	Asn	Gln	Asp
	995					1000						1005			
Gln	Pro	Asn	Ala	Val	Lys	Lys	Asn	Asn	Thr	Lys	Thr	Ile	Leu	Glu	Gln
	1010					1015					1020				
Lys	Gly	Asn	Glu	Lys	Lys	Ser	Ala	Ile	Ala	Gln	Thr	Pro	Asp	Ala	Thr
1025				1030						1035				1040	
Thr	Glu	Glu	Lys	Gln	Glu	Ala	Val	Ser	Ala	Val	Ser	Gln	Ala	Val	Thr

				1045					1050					1055	
Asn	Gly	Ile	Thr	His	Ile	Asn	Gln	Ala	Asn	Ser	Asn	Asp	Asp	Val	Asp
				1060					1065					1070	
Gln	Glu	Leu	Ser	Asn	Ala	Glu	Gln	Ile	Ile	Thr	His	Thr	Asn	Val	Asn
				1075					1080					1085	
Val	Gln	Lys	Lys	Pro	Gln	Ala	Arg	Gln	Ala	Leu	Ile	Ala	Lys	Thr	Asn
				1090					1095					1100	
Glu	Lys	Gln	Ser	Ala	Ile	Asn	Ser	Asp	Asn	Glu	Gly	Thr	Ile	Glu	Glu
1105						1110				1115					1120
Lys	Gln	Lys	Ala	Ile	Gln	Ser	Leu	Asn	Asp	Ala	Lys	Asn	Leu	Ala	Asp
				1125						1130					1135
Glu	Gln	Ile	Thr	Gln	Ala	Ala	Ser	Asn	Gln	Asn	Val	Asp	Asn	Ala	Leu
				1140						1145					1150
Asn	Ile	Gly	Ile	Ser	Asn	Ile	Ser	Lys	Ile	Gln	Thr	Asn	Phe	Thr	Lys
				1155						1160					1165
Lys	Gln	Gln	Ala	Arg	Asp	Gln	Val	Asn	Gln	Lys	Phe	Gln	Glu	Lys	Glu
				1170						1175					1180
Ala	Glu	Leu	Asn	Ser	Thr	Pro	His	Ala	Thr	Gln	Asp	Glu	Lys	Gln	Asp
1185						1190				1195					1200
Ala	Leu	Thr	Arg	Leu	Thr	Gln	Ala	Lys	Glu	Thr	Ala	Leu	Asn	Asp	Ile
				1205						1210					1215
Asn	Gln	Ala	Gln	Thr	Asn	Gln	Asn	Val	Asp	Thr	Ala	Leu	Thr	Ser	Gly
				1220						1225					1230
Ile	Gln	Asn	Ile	Gln	Asn	Thr	Gln	Val	Asn	Val	Arg	Lys	Lys	Gln	Glu
				1235						1240					1245
Ala	Lys	Thr	Thr	Ile	Asn	Asp	Ile	Val	Gln	Gln	His	Lys	Gln	Ser	Ile
				1250						1255					1260
Gln	Asn	Asn	Asp	Asp	Ala	Thr	Thr	Glu	Glu	Lys	Glu	Val	Ala	Asn	Asn
1265						1270				1275					1280
Leu	Val	Asn	Ala	Ser	Gln	Gln	Asn	Val	Ile	Ser	Lys	Ile	Asp	Asn	Ala
				1285						1290					1295
Thr	Thr	Asn	Asn	Gln	Ile	Asp	Gly	Ile	Val	Ser	Asp	Gly	Arg	Gln	Ser
				1300						1305					1310
Ile	Asn	Ala	Ile	Thr	Pro	Asp	Thr	Ser	Ile	Lys	Arg	Asn	Ala	Lys	Asn
				1315						1320					1325
Asp	Ile	Asp	Ile	Lys	Ala	Ala	Asp	Lys	Lys	Ile	Lys	Ile	Gln	Arg	Ile
				1330						1335					1340
Asn	Asp	Ala	Thr	Asp	Glu	Glu	Ile	Gln	Glu	Ala	Asn	Arg	Lys	Ile	Glu
1345						1350				1355					1360
Glu	Ala	Lys	Ile	Glu	Ala	Lys	Asp	Asn	Ile	Gln	Arg	Asn	Ser	Thr	Arg
				1365						1370					1375
Asp	Gln	Val	Asn	Glu	Ala	Lys	Thr	Asn	Gly	Ile	Asn	Lys	Ile	Glu	Asn
				1380						1385					1390
Ile	Thr	Pro	Ala	Thr	Thr	Val	Lys	Ser	Glu	Ala	Arg	Gln	Ala	Val	Gln
				1395						1400					1405
Asn	Lys	Ala	Asn	Glu	Gln	Ile	Asn	His	Ile	Gln	Asn	Thr	Pro	Asp	Ala
				1410						1415					1420
Thr	Asn	Glu	Glu	Lys	Gln	Glu	Ala	Ile	Asn	Arg	Val	Ser	Ala	Glu	Leu
1425						1430				1435					1440
Ala	Arg	Val	Gln	Ala	Gln	Ile	Asn	Ala	Glu	His	Thr	Thr	Gln	Gly	Val
				1445						1450					1455
Lys	Thr	Ile	Lys	Asp	Asp	Ala	Ile	Thr	Ser	Leu	Ser	Arg	Ile	Asn	Ala
				1460						1465					1470
Gln	Val	Val	Glu	Lys	Glu	Ser	Ala	Arg	Asn	Ala	Ile	Glu	Gln	Lys	Ala
				1475						1480					1485
Thr	Gln	Gln	Thr	Gln	Phe	Ile	Asn	Asn	Asn	Asp	Asn	Ala	Thr	Asp	Glu

1490	1495	1500
Glu Lys Glu Val Ala Asn Asn Leu Val Ile Ala Thr Lys Gln Lys Ser		
1505	1510	1515
Leu Asp Asn Ile Asn Ser Leu Ser Ser Asn Asn Asp Val Glu Asn Ala		1520
	1525	1530
Lys Val Ala Gly Ile Asn Glu Ile Ala Asn Val Leu Pro Ala Thr Ala		1535
	1540	1545
Val Lys Ser Lys Ala Lys Lys Asp Ile Asp Gln Lys Leu Ala Gln Gln		1550
	1555	1560
Ile Asn Gln Ile Gln Thr His Gln Thr Ala Thr Thr Glu Glu Lys Glu		1565
	1570	1575
Ala Ala Ile Gln Leu Ala Asn Gln Lys Ser Asn Glu Ala Arg Thr Ala		1580
1585	1590	1595
Ile Gln Asn Glu His Ser Asn Asn Gly Val Ala Gln Ala Lys Ser Asn		1600
	1605	1610
Gly Ile His Glu Ile Glu Leu Val Met Pro Asp Ala His Lys Lys Ser		1615
	1620	1625
Asp Ala Lys Gln Ser Ile Asp Asn Lys Tyr Asn Glu Gln Ser Asn Thr		1630
	1635	1640
Ile Asn Thr Thr Pro Asp Ala Thr Asp Glu Glu Lys Gln Lys Ala Leu		1645
1650	1655	1660
Asp Lys Leu Lys Ile Ala Lys Asp Ala Gly Tyr Asn Lys Val Asp Gln		1665
1665	1670	1675
Ala Gln Thr Asn Gln Gln Val Ser Asp Ala Lys Thr Glu Ala Ile Asp		1680
	1685	1690
Thr Ile Thr Asn Ile Gln Ala Asn Val Ala Lys Lys Pro Ser Ala Arg		1695
	1700	1705
Val Glu Leu Asp Ser Lys Phe Glu Asp Leu Lys Arg Gln Ile Asn Ala		1710
	1715	1720
Thr Pro Asn Ala Thr Glu Glu Lys Gln Asp Ala Ile Gln Arg Leu		1725
1730	1735	1740
Asn Gly Lys Arg Asp Glu Val Lys Asn Leu Ile Asn Gln Asp Arg Arg		1745
1745	1750	1755
Asp Asn Glu Val Glu Gln His Lys Asn Ile Gly Leu Gln Glu Leu Glu		1760
	1765	1770
Thr Ile His Ala Asn Pro Thr Arg Lys Ser Asp Ala Leu Gln Glu Leu		1775
	1780	1785
Gln Thr Lys Phe Ile Ser Gln Thr Glu Leu Ile Asn Asn Asn Lys Asp		1790
	1795	1800
Ala Thr Asn Glu Glu Lys Asp Glu Ala Lys Arg Leu Leu Glu Ile Ser		1805
1810	1815	1820
Lys Asn Lys Thr Ile Thr Asn Ile Asn Gln Ala Gln Thr Asn Asn Gln		1825
1825	1830	1835
Val Asp Asn Ala Lys Asp Asn Gly Met Asn Glu Ile Ala Thr Ile Ile		1840
	1845	1850
Pro Ala Thr Thr Ile Lys Thr Asp Ala Lys Thr Ala Ile Asp Lys Lys		1855
	1860	1865
Ala Glu Gln Val Thr Ile Ile Asn Gly Asn Asn Asp Ala Thr Asp		1870
	1875	1880
Glu Glu Lys Ala Glu Ala Arg Lys Leu Val Glu Lys Ala Lys Ile Glu		1885
1890	1895	1900
Ala Lys Ser Asn Ile Thr Asn Ser Asp Thr Glu Arg Glu Val Asn Gly		1905
1905	1910	1915
Ala Lys Thr Asn Gly Leu Glu Lys Ile Asn Asn Ile Gln Pro Ser Thr		1920
	1925	1930
Gln Thr Lys Thr Asn Ala Lys Gln Glu Ile Asn Asp Lys Ala Gln Glu		1935

2385 2390 2395 2400
 Lys Thr Asn Ala Leu Ala Ala Leu Ala Ser Glu Ala Lys Asn Lys Asn
 2405 2410 2415
 Ala Ile Ile Asp Gln Thr Pro Asn Ala Thr Ala Glu Glu Lys Glu Glu
 2420 2425 2430
 Ala Asn Asn Lys Val Asp Arg Leu Gln Glu Glu Ala Asp Ala Asn Ile
 2435 2440 2445
 Leu Lys Ala His Thr Thr Asp Glu Val Asn Asn Ile Lys Asn Gln Ala
 2450 2455 2460
 Val Gln Asn Ile Asn Ala Val Gln Val Glu Val Ile Lys Lys Gln Asn
 2465 2470 2475 2480
 Val Lys Asn Gln Leu Asn Gln Phe Ile Asp Asn Gln Lys Lys Ile Ile
 2485 2490 2495
 Glu Asn Thr Pro Asp Ala Thr Leu Glu Glu Lys Ala Glu Ala Asn Arg
 2500 2505 2510
 Leu Leu Gln Asn Val Leu Thr Ser Thr Ser Asp Glu Ile Ala Asn Val
 2515 2520 2525
 Asp His Asn Asn Glu Val Asp Gln Ala Leu Asp Lys Ala Arg Pro Lys
 2530 2535 2540
 Ile Glu Glu Ile Val Pro Gln Val Ser Lys Lys Arg Asp Val Leu Asn
 2545 2550 2555 2560
 Ala Ile Gln Glu Ala Phe Asn Ser Gln Thr Gln Glu Ile Gln Glu Asn
 2565 2570 2575
 Gln Glu Ala Thr Asn Glu Glu Lys Thr Glu Ala Leu Asn Lys Ile Asn
 2580 2585 2590
 Gln Leu Leu Asn Gln Ala Lys Val Asn Ile Asp Gln Ala Gln Ser Asn
 2595 2600 2605
 Lys Asp Val Asp Ser Ala Lys Thr Arg Ser Ile Gln Asp Ile Glu Gln
 2610 2615 2620
 Ile Gln Pro His Pro Gln Thr Lys Ala Thr Gly Arg His Arg Leu Asn
 2625 2630 2635 2640
 Glu Lys Ala Asn Gln Gln Gln Ser Thr Ile Ala Thr His Pro Asn Ser
 2645 2650 2655
 Thr Ile Glu Glu Arg Gln Glu Ala Ser Ala Lys Leu Gln Glu Val Leu
 2660 2665 2670
 Lys Lys Ala Ile Ala Lys Ile Asp Lys Gly Gln Thr Asn Asp Asp Val
 2675 2680 2685
 Glu Lys Thr Val Val Asn Gly Ile Ala Glu Ile Glu Asn Ile Leu Pro
 2690 2695 2700
 Ala Thr Thr Val Lys Asp Lys Ala Lys Ala Asp Val Asn Ala Glu Lys
 2705 2710 2715 2720
 Glu Gln Lys Asn Leu Gln Ile Asn Ser Asn Asp Glu Ala Thr Thr Glu
 2725 2730 2735
 Glu Lys Leu Val Ala Ser Asp Asn Leu Asn His Val Val Glu Thr Thr
 2740 2745 2750
 Asn Gln Ala Ile Glu Asp Ala Pro Asp Thr Asn Gln Val Asn Val Glu
 2755 2760 2765
 Lys Asn Lys Gly Ile Gly Thr Ile Arg Asp Ile Gln Pro Leu Val Val
 2770 2775 2780
 Lys Lys Pro Thr Ala Lys Ser Lys Ile Glu Ser Ala Val Glu Lys Lys
 2785 2790 2795 2800
 Lys Thr Glu Ile Asn Gln Thr Gln Asn Ala Thr His Asp Glu Val Arg
 2805 2810 2815
 Glu Gly Leu Asn Gln Leu Asn Gln Ile His Glu Lys Ala Lys Asn Asp
 2820 2825 2830
 Val Asn Gln Ser Gln Thr Asn Gln Gln Val Glu Asn Ala Glu Gln Asn

2835	2840	2845
Ser Leu Asp Gln Ile Asn Asn Phe Arg Pro Asp Phe Ser Lys Lys Arg		
2850	2855	2860
Asn Ala Val Ala Glu Ile Val Lys Ala Gln Gln Asn Lys Ile Asp Glu		
2865	2870	2875
Ile Glu Gln Glu Phe Ser Ala Thr Gln Glu Glu Lys Asp Asn Ala Leu		2880
2885	2890	2895
Gln His Leu Asp Glu Gln Val Lys Glu Ile Ile Asn Ser Ile Asn Gln		
2900	2905	2910
Ala Asn Thr Asp Asn Glu Val Asp Asn Ala Lys Thr Ser Gly Leu Asn		
2915	2920	2925
Asn Ile Thr Glu Tyr Arg Pro Glu Tyr Asn Lys Lys Lys Asn Ala Ile		
2930	2935	2940
Leu Lys Leu Tyr Asp Val Ser Asp Thr Gln Glu Ala Ile Ile Asn Gly		
2945	2950	2955
Tyr Pro Asp Ala Thr Glu Asp Glu Leu Gln Glu Ala Asn Ser Lys Leu		
2965	2970	2975
Asn Lys Ile Leu Leu Asp Ala Lys Lys Gln Ile Gly Leu Ala His Thr		
2980	2985	2990
Asn Asn Glu Val Asp Asp Ile Tyr Asn Glu Val Ser Gln Lys Met Lys		
2995	3000	3005
Thr Ile Leu Pro Arg Val Asp Thr Lys Ala Val Ala Arg Ser Val Leu		
3010	3015	3020
Asn Ala Leu Ala Lys Gln Leu Ile Lys Thr Phe Glu Asn Thr Ala Asp		
3025	3030	3035
Val Thr His Glu Glu Arg Asn Asp Ala Ile Asn His Val Lys Glu Gln		
3045	3050	3055
Leu Ser Leu Val Phe Asn Ala Ile Glu Lys Asp Arg Lys Asp Ile Gln		
3060	3065	3070
Val Ala Gln Asp Glu Leu Phe Gly Leu Asn Glu Leu Asn Ser Ile Phe		
3075	3080	3085
Ile Asn Ile Thr Gln Lys Pro Thr Ala Arg Lys Ala Ile Ser Gly Met		
3090	3095	3100
Ala Ser Gln Leu Asn Asn Ser Ile Asn Asn Thr Pro Tyr Ala Thr Glu		
3105	3110	3115
Glu Glu Arg Gln Ile Ala Leu Asn Lys Val Lys Ala Ile Val Asp Asp		
3125	3130	3135
Ala Asn Glu Lys Ile Arg Glu Ala Asn Thr Asp Ser Glu Val Leu Gly		
3140	3145	3150
Thr Lys Thr Asn Ala Ile Thr Leu Leu Gln Ala Ile Ser Ala Asp Val		
3155	3160	3165
Gln Val Lys Pro Gln Ala Phe Glu Glu Ile Asn Ala Gln Ala Glu Ile		
3170	3175	3180
Gln Arg Glu Arg Ile Asn Gly Asn Ser Asp Ala Thr Arg Glu Glu Lys		
3185	3190	3195
Glu Glu Ala Leu Lys Gln Val Asp Thr Leu Val Asn His Ser Phe Ile		
3205	3210	3215
Thr Ile Asn Asn Val Asn Lys Asn Gln Glu Val Tyr Asp Thr Lys Asp		
3220	3225	3230
Lys Thr Ile Glu Ala Ile His Lys Ile Lys Pro Ile Ser Thr Ile Lys		
3235	3240	3245
Pro Gln Ala Leu Asn Glu Ile Thr Ile Gln Leu Asp Thr Gln Arg Asp		
3250	3255	3260
Leu Ile Lys Asn Asn Lys Glu Ser Thr Val Glu Glu Lys Ala Ser Ala		
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Ile Asp Lys Leu Ile Lys Thr Ala Ala Arg Ile Ala Glu Ala Ile Asp		3280

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 Trp Gly Glu Val Ile Val Ile Gly Phe Tyr Tyr Tyr Tyr Ile Ile Ser
 35 40 45
 Ile Leu Pro Gln Ser Ser Ile Ile Ser Met Ile Cys Pro Asp Thr Ala
 50 55 60
 Ser Ala
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<212> PRT

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 Val Asp Val Leu Leu Glu Ser Leu Phe Ile Gln Phe His Ser Gln Cys
 35 40 45
 Leu Asn Gln Asn Leu Ile Asn Asp Lys Ala
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<210> 5945

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<212> PRT

<213> S.epidermidis

<400> 5945

Arg Arg Asp Tyr Met Glu Thr Val Gln Phe Tyr Asn Gly Arg Thr Met
 1 5 10 15
 Pro Lys Ile Gly Leu Gly Thr Tyr Arg Val Lys Asp Gly Asp Glu Cys
 20 25 30
 Arg Glu Ser Val Lys Tyr Ala Ile Glu Arg Gly Tyr Arg Ser Ile Asp
 35 40 45
 Thr Ala Met Ile Tyr Gly Asn Glu Glu Thr Val Gly Gln Gly Ile Lys
 50 55 60
 Glu Gly Leu Glu Ser Thr Gly Leu Ser Arg Glu Asp Leu Phe Ile Thr
 65 70 75 80
 Ser Lys Leu Trp Leu Thr Asp Phe Gly Arg Gln Asn Val Glu Asp Ala
 85 90 95
 Tyr Arg Gln Ser Val Ala Lys Leu Gly Leu Asp Tyr Leu Asp Leu Tyr
 100 105 110
 Leu Met His Trp Pro Gly Thr Asn Glu Ala Val Met Ile Asp Thr Trp
 115 120 125
 Arg Gly Met Glu Asp Leu Tyr Lys Gln Asn Gln Val Lys Asn Ile Gly
 130 135 140
 Val Ser Asn Phe Thr Pro Glu His Phe Glu Ala Leu Leu Ala Gln Val
 145 150 155 160
 Ser Ile Lys Pro Val Ile Asn Gln Val Glu Phe His Pro Tyr Leu Thr
 165 170 175

Gln Asn Lys Leu Arg Lys Tyr Leu Glu Ala Gln Asn Ile Ile Met Glu
 180 185 190
 Ser Trp Ser Pro Leu Met Asn Ser Gln Ile Leu His Asp Glu Val Ile
 195 200 205
 Asn Glu Val Ala Asn Glu Val Gly Lys Thr Pro Ala Gln Val Val Ile
 210 215 220
 Arg Trp Asn Ile Gln His Asp Val Val Val Ile Pro Lys Ser Val Thr
 225 230 235 240
 Pro His Arg Ile Glu Glu Asn Leu Asp Val Trp Asn Phe Glu Leu Ser
 245 250 255
 Asp Asn Gln Met Glu Arg Ile Asp Gln Leu Asn Gln Asp Lys Arg Ile
 260 265 270
 Gly Pro Asn Pro Leu Glu Phe Asp Gly Lys
 275 280

<210> 5946

<211> 443

<212> PRT

<213> S.epidermidis

<400> 5946

Lys Asp Cys Tyr Lys Glu Ile Arg Gly Asn Gly Met Thr Lys Asn Glu
 1 5 10 15
 Gln Ile Ile Lys His Ile Glu Ser Leu Ser Ile Gly Ser Lys Ile Ser
 20 25 30
 Val Arg Lys Ile Ala Lys Asp Leu Asn Val Ser Glu Gly Thr Ala Tyr
 35 40 45
 Arg Ala Ile Lys Asp Ala Ser Gln Leu Gly Ile Val Ala Thr Ile Asp
 50 55 60
 Arg Val Gly Thr Val Arg Ile Glu Lys Arg Ser Arg Glu Asn Leu Asp
 65 70 75 80
 Asn Leu Thr Phe Asn Glu Ile Ala Asn Ile Val Glu Gly Gln Ile Leu
 85 90 95
 Ala Gly Arg Ala Gly Leu Asn Lys Ser Val Ser Lys Phe Ala Ile Gly
 100 105 110
 Ala Met Gln Phe Asp Asp Ile Leu Lys Tyr Ile Gly Lys His Thr Leu
 115 120 125
 Leu Ile Val Gly Asn Arg Glu Asn Val Gln Ile Glu Ala Leu Lys Arg
 130 135 140
 Glu Thr Ser Ile Leu Ile Thr Gly Gly Phe Arg Pro Ser Ala Glu Ile
 145 150 155 160
 Ile Arg Tyr Ala Asp Glu His Glu Leu Pro Ile Ile Ser Ser Ser Tyr
 165 170 175
 Asp Thr Phe Leu Val Ala Asn Ile Ile Asn Lys Ala Met Phe Asn Gln
 180 185 190
 Lys Ile Arg Lys Glu Ile Leu Val Val Glu Asp Ile Val Lys Pro Ile
 195 200 205
 Asn Glu Leu Ser Val Leu Phe Asp Ser Met Thr Ile His Asp Tyr Lys
 210 215 220
 Lys Ile Ala Asn Glu Thr Gly His Thr Arg Phe Pro Ile Val Asn Glu
 225 230 235 240
 Glu Phe Lys Leu Val Gly Ile Val Thr Ser Arg Glu Ile Ile Asn Met
 245 250 255
 Asn Glu Glu Asp Leu Leu Gly Lys Val Met Thr Lys Asn Pro Leu Ser
 260 265 270
 Val Lys Leu Thr Asn Thr Val Ala Ser Cys Ala His Leu Leu Ile Trp

275 280 285
 Glu Gly Ile Glu Leu Leu Pro Val Thr Asp Asn Asn Lys Lys Ala Val
 290 295 300
 Gly Val Ile Asn Arg Gln Asp Val Leu Lys Ser Met Gln Leu Leu Gly
 305 310 315 320
 Arg Gln Pro Gln Ile Gly Glu Thr Val Asn Asp Gln Ile Ala Lys His
 325 330 335
 Ile Ser Ile His Gln Gln Gly Ile Asn Val Asp Val Ser Pro Leu Ile
 340 345 350
 Thr Asn His Tyr Gly Thr Leu Ser Lys Ala Val Phe Val Gly Ile Ile
 355 360 365
 Glu Glu Thr Ile Arg His Glu Met Arg Lys Tyr Lys Lys Gly Asn Val
 370 375 380
 Met Ile Glu Ser Met Ser Ile Ile Tyr Ile Lys Thr Val Pro Ile Glu
 385 390 395 400
 Ser Thr Ile Glu Val His Tyr Glu Met Leu Asp Val Gly Arg Tyr Phe
 405 410 415
 Ala Lys Leu Glu Val Thr Met Ile Asn Asn Gly Glu Lys Val Ala Asn
 420 425 430
 Ala Leu Val Ile Cys Gln Met Phe Asp Gly Phe
 435 440

<210> 5947
 <211> 72
 <212> PRT
 <213> S.epidermidis

<400> 5947
 Leu Ser Ile Leu Thr Ile Arg Asn Val Ser Ser Ser Leu Ser Asn Leu
 1 5 10 15
 Asn Ser Thr Ser Lys Cys Phe Lys Arg Ala Phe Asn Leu Ser Leu Ile
 20 25 30
 Trp Lys Thr Phe Ile Ile Asn Thr Pro Tyr Phe Arg Thr Phe Leu Gln
 35 40 45
 Phe Thr Ile Asn Asn Val Glu Leu Thr Glu Lys Thr Gln Ile Ile Thr
 50 55 60
 Leu Ile Cys Tyr Tyr Lys Leu Met
 65 70

<210> 5948
 <211> 386
 <212> PRT
 <213> S.epidermidis

<400> 5948
 Asn Ile Phe Tyr Leu Lys Gly Val Tyr Met Met His Thr Ile Leu Leu
 1 5 10 15
 Val Val Phe Met Ile Ile Leu Gly Ala Ile Ile Gly Gly Val Thr Asn
 20 25 30
 Met Ile Ala Ile Lys Met Leu Phe His Pro Phe Lys Pro Tyr Tyr Ile
 35 40 45
 Phe Arg Phe Arg Ile Pro Phe Thr Pro Gly Leu Ile Pro Lys Arg Arg
 50 55 60
 Glu Glu Ile Ala Arg Lys Ile Gly Gln Val Ile Glu Glu His Leu Ile
 65 70 75 80
 Thr Glu Glu Leu Ile Arg Gln Lys Leu Asn Gln Pro Gln Ser Arg Asn

85 90 95
 Met Ile Gln Gln Leu Ile His Lys Gln Ile Ser Lys Leu Lys Asn Asp
 100 105 110
 Asp Val Thr Ile Lys Lys Ile Ala Gly Phe Leu Gly Ile Asp Val Asn
 115 120 125
 Glu Leu Val Asp Tyr Lys Leu Thr Thr Lys Phe Leu Asn Lys Leu Asn
 130 135 140
 Phe Trp Tyr Glu Ser Asn Lys Tyr Arg Lys Leu Ser Glu Ile Leu Pro
 145 150 155 160
 Gln Ser Phe Leu Asp Gln Cys Lys Gly Gln Ile Glu Tyr Ile Thr Asp
 165 170 175
 Phe Leu Cys Glu Arg Ala Arg Asn Tyr Leu Ser Ser Glu Lys Gly Glu
 180 185 190
 Arg Asp Ile Tyr Glu Met Leu Asp Thr Phe Phe Asn Glu Lys Gly Arg
 195 200 205
 Ile Ile Gly Leu Leu Gln Met Phe Met Thr Lys Glu Ser Ile Ala Asp
 210 215 220
 Arg Ile Gln His Glu Leu Ile Arg Leu Thr Gln His Pro Gln Ser Gln
 225 230 235 240
 Lys Ile Ile Thr Lys Val Leu Asn Asp Glu Tyr Glu Thr Phe Lys Asp
 245 250 255
 Lys Asn Leu Asp Glu Ile Ile Lys Glu Gln Gln Phe Lys Asn Tyr Ser
 260 265 270
 Gln Leu Val Leu Asn Glu Leu Lys Thr Tyr Leu Asn Leu Lys Asp Lys
 275 280 285
 Thr Glu Arg Pro Ile Lys Gln Val Val Pro Gln Phe Ile Gln Phe Leu
 290 295 300
 Glu Asp Asp Thr Ser Lys Arg Met Thr Asp Phe Ile Ile Lys Gly Thr
 305 310 315 320
 Ser Lys His Leu Thr Asn Ile Met Lys Lys Ile Asn Leu Arg Gln Leu
 325 330 335
 Val Glu Glu Gln Ile Asn Thr Phe Asp Leu Lys Tyr Ile Glu Asn Leu
 340 345 350
 Ile Ile Asp Ile Ala Asn Lys Glu Leu Lys Leu Ile Met Thr Leu Gly
 355 360 365
 Phe Ile Leu Gly Gly Ile Ile Gly Phe Phe Gln Gly Val Ile Ala Ile
 370 375 380
 Phe Val
 385

<210> 5949

<211> 248

<212> PRT

<213> S.epidermidis

<400> 5949

Gly Gly Ile Leu Met Arg Lys Leu Phe Leu Ser Ile Leu Ser Ile Ile
 1 5 10 15
 Ile Ile Ser Ser Phe Cys Val Ala Thr Gly Phe Gln Asn Val Asn Ala
 20 25 30
 Ala Asn Asn Glu Val Ser Lys Pro Gln Ser Asn Val Asp Ser Lys Thr
 35 40 45
 Lys Gln Asn Ile Ile Lys Lys Ile Lys Lys Ser Asn Ala Tyr Lys Lys
 50 55 60
 His Ala Asn Ser Thr Ser Ile Asp Ser Ile Lys Asp Asp Asp Ile Ile
 65 70 75 80

5949
 248
 PRT
 S.epidermidis

Val His Leu Asp Lys Gly Lys Asn Thr Asn Val Tyr Ser Ile Asn Tyr
 85 90 95
 Val Phe Gly Lys Lys Leu Ala Lys Met Asn Asp Asn Leu Ala Met Ile
 100 105 110
 Glu Leu Lys Tyr Asn Glu Ala Asn Asn Glu Val Phe Tyr Asn His Met
 115 120 125
 Met Tyr Ser Lys Phe Val Lys Tyr Asn Asn Lys Glu Tyr Ile Asn Met
 130 135 140
 Lys Gly Ile Leu Asn Gly Lys Pro Tyr Tyr Glu Phe Asn Ile Asp Gln
 145 150 155 160
 Lys Gly His Tyr Tyr Asp Lys Asn Phe Lys His Thr Ser Lys Asp Glu
 165 170 175
 Ile Glu Lys Asp Ser Ala Lys Asn Leu Pro Pro Lys Glu Arg Gly Trp
 180 185 190
 Cys Glu Trp Ala Val Gly Ala Leu Cys Gly Thr Gly Gly Ala Ala Gly
 195 200 205
 Cys Trp Ala Thr Ala Thr Ala Leu Gly Ile Thr Thr Gly Trp Gly Gly
 210 215 220
 Phe Ser Leu Ala Thr Ile Cys Gly Leu Ile Ser Ser Leu Gly Cys Thr
 225 230 235 240
 Gly Ala Thr Asn Tyr Ile Cys Lys
 245

<210> 5950
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 5950
 Ser Ile Val Tyr Asp Trp Ser Arg Met Leu Phe Ile Tyr Leu Thr Arg
 1 5 10 15
 Val Val Pro Arg Gln Thr Arg Pro Leu Leu Gly Thr Ser Phe Phe Met
 20 25 30
 Leu Ser Lys Val Asn Leu Phe Asn Lys Pro Thr Ile Arg Cys Phe Ile
 35 40 45
 Lys

<210> 5951
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 5951
 Ile Asn Pro Leu His Phe Lys Ser Ser Ile Lys Ala Leu Ala Ile Asp
 1 5 10 15
 Lys Ile Leu Leu Asn Tyr Phe Ile Asn Leu Lys Lys Leu Lys Ile Phe
 20 25 30
 Asn Lys Tyr Ser Asp Ile Ser Asp Leu Phe Lys His Ile Lys Lys Arg
 35 40 45
 Pro Tyr Lys Met
 50

<210> 5952
 <211> 417
 <212> PRT

<213> S.epidermidis

<400> 5952

Thr Ile Leu Tyr Ile Phe Ser Ile Asn Phe Ala Asp Ile Leu Arg Arg
 1 5 10 15
 Ile Lys Leu Met Val Lys Phe Ile His Cys Ala Asp Leu His Leu Asp
 20 25 30
 Ser Pro Phe Lys Ser Lys Ser Tyr Leu Ser Pro Asn Ile Phe Glu Asp
 35 40 45
 Val Gln Lys Ser Ala Tyr Glu Ser Phe Lys Asn Ile Val Asp Leu Ala
 50 55 60
 Leu Lys Gln Glu Val Asp Phe Ile Ile Ile Ala Gly Asp Leu Phe Asp
 65 70 75 80
 Ser Glu Asn Arg Thr Leu Arg Ala Glu Val Phe Leu Asn Glu Gln Phe
 85 90 95
 Glu Arg Leu Arg Lys Glu Gln Ile Phe Val Tyr Ile Cys His Gly Asn
 100 105 110
 His Asp Pro Leu Thr Ser Lys Ile Thr Ser Gln Trp Pro Asn Asn Val
 115 120 125
 Ser Val Phe Ser Asn Gln Val Glu Thr Tyr Gln Ala Ile Thr Lys Ser
 130 135 140
 Gly Glu Thr Ile Tyr Ile His Gly Phe Ser Tyr Gln Asn Asp Ala Ser
 145 150 155 160
 Tyr Glu Asn Lys Ile Asp Ala Tyr Pro Ser Ser Gln Gly Gln Lys Gly
 165 170 175
 Ile His Ile Gly Val Leu His Gly Thr Tyr Ser Lys Ser Ser Val Lys
 180 185 190
 Asp Arg Tyr Thr Glu Phe Arg Leu Glu Asp Leu Asn Gln Arg Leu Tyr
 195 200 205
 His Tyr Trp Ala Leu Gly His Ile His Gln Arg Glu Gln Leu Ser Asp
 210 215 220
 Met Pro Val Ile Asn Tyr Pro Gly Asn Ile Gln Gly Arg His Phe Asn
 225 230 235 240
 Glu Leu Gly Glu Lys Gly Cys Leu Leu Val Glu Gly Asp His Leu Lys
 245 250 255
 Leu Thr Thr Gln Phe Tyr Pro Thr Gln Phe Ile Lys Phe Glu Glu Ala
 260 265 270
 Thr Ile Glu Thr Asp His Thr Ser Lys Gln Gly Leu Tyr Asp Val Ile
 275 280 285
 Gln Ser Phe Lys Asp Lys Val Arg Thr Glu Gly Lys Ser Phe Tyr Arg
 290 295 300
 Leu Asn Val Arg Ile Asn Ser Glu Asp Ile Ile Ala Pro Gln Asp Leu
 305 310 315 320
 Ile Gln Leu Lys Glu Met Ile Thr Glu Phe Glu Glu Asn Glu Asn Gln
 325 330 335
 Phe Val Phe Ile Glu Asp Leu Asn Leu Gln Tyr Val Gln Asn Asp Glu
 340 345 350
 Met Pro Ile Val Lys Glu Phe Ser Pro Glu Leu Leu Asp Asp Ala Ser
 355 360 365
 Leu Phe Asp Ser Ala Met Thr Asp Leu Tyr Leu Asn Pro Arg Ala Ser
 370 375 380
 Lys Phe Leu Asp Asp Tyr Asn Glu Phe Asp Lys Val Glu Leu Val Asn
 385 390 395 400
 His Ala Glu Arg Leu Leu Lys Asp Glu Met Arg Gly Glu Gln Asn Asp
 405 410 415
 Asn

<210> 5953
 <211> 101
 <212> PRT
 <213> S.epidermidis

<400> 5953
 Lys Val Ala Tyr Lys Thr Met Gln Leu Lys Tyr Asn Glu Ile Asn Lys
 1 5 10 15
 Asn Gln Leu Ile Ser Ser Glu Thr Pro Phe Leu Glu Asn Phe Gln Asp
 20 25 30
 Cys Ile Lys Ile Asn Lys Lys Asn Lys Ile Ser Gln Ser Thr Leu Asn
 35 40 45
 Cys Tyr Tyr Asn Ala Leu Asn Ile Phe Asp Glu Lys Phe Gly Asn Thr
 50 55 60
 Ala Ile Lys Asn Phe Ser Gln Leu Lys Tyr Ser Glu Met Leu Lys Glu
 65 70 75 80
 Tyr Ala Glu Gly His Ile Ile Gly Gly His Lys Lys Asp Ile Arg Lys
 85 90 95
 Gln Val Phe Lys Asn
 100

<210> 5954
 <211> 568
 <212> PRT
 <213> S.epidermidis

<400> 5954
 Glu Glu Lys Tyr Met Val Leu Phe Ile Ile Leu Ala Ile Leu Val Val
 1 5 10 15
 Ile Leu Ile Ala Ile Gly Val Leu Phe Tyr Met Arg Ser Asn Lys Arg
 20 25 30
 Asn Leu Ile Glu Lys Thr Glu Glu Arg Lys Asn Glu Ile Glu Gln Leu
 35 40 45
 Pro Leu Asp Asp Asn Leu Arg Lys Leu Thr Gly Leu Asn Leu Lys Gly
 50 55 60
 Glu Thr Lys Thr Lys Tyr Asp Ala Met Lys Lys Asp Asn Thr Glu Thr
 65 70 75 80
 Thr Asn Lys Tyr Leu Ala Pro Val Glu Glu Lys Ile Gln Asn Ala Glu
 85 90 95
 Glu Leu Leu Glu Lys Phe Lys Phe Thr Ala Ala Gln Thr Glu Ile Asp
 100 105 110
 Asp Ala His Glu Leu Met Asp Gln Tyr Glu Glu Asn Tyr Gln His Gln
 115 120 125
 Val Thr Gln Val Asp Asp Ile Ile Asn Leu His Lys Glu Asn Glu Ala
 130 135 140
 Leu Tyr Glu Lys Cys Lys Val Asp Tyr Arg Glu Met Lys Arg Asp Val
 145 150 155 160
 Leu Ala Asn Arg His Gln Phe Gly Glu Ala Ala Glu Pro Leu Glu Asn
 165 170 175
 Glu Ile Glu Asn Tyr Glu Pro Lys Leu Asn Glu Tyr Glu Asn Leu Lys
 180 185 190
 Ser Glu Gly Asn Tyr Val Gln Ala His Asn His Ile Ala Ala Leu Glu
 195 200 205
 Asp Gln Ile Lys Asn Leu Lys Ser Tyr Met Asp Glu Ile Pro Glu Leu

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      210                      215                      220
Ile Arg Glu Thr Gln Lys Glu Leu Pro Gly Gln Phe Gln Asp Leu Lys
225                      230                      235                      240
Tyr Gly Cys Arg Asp Leu Lys Val Glu Gly Tyr Asp Leu Asp His Val
      245                      250                      255
Lys Val Asp Gly Thr Ile Gln Ser Leu Lys Thr Glu Leu Ser Phe Val
      260                      265                      270
Glu Pro Met Ile Ser Arg Leu Glu Leu Asp Glu Ala Asn Asn Lys Leu
      275                      280                      285
Glu Asn Ile Asn Asp Lys Leu Asp Glu Met Tyr Asp Leu Ile Glu Tyr
      290                      295                      300
Glu Val Lys Ala Lys Asn Glu Val Glu Glu Thr Lys Asp Ile Ile Thr
305                      310                      315                      320
Asp Asp Leu Phe Lys Ala Lys Asp Met Asn Tyr Thr Leu Gln Thr Glu
      325                      330                      335
Ile Glu Tyr Val Arg Glu Asn Tyr Tyr Ile Asn Glu Ser Asp Ala Gln
      340                      345                      350
Ser Val Arg Gln Phe Glu Asn Glu Ile Gln Ser Leu Ile Ser Val Tyr
      355                      360                      365
Asp Asp Ile Leu Lys Glu Thr Ser Lys Ser Ala Val Arg Tyr Ser Glu
      370                      375                      380
Val Gln Asp Asn Leu Gln Tyr Leu Glu Asp His Val Ser Val Ile Asn
385                      390                      395                      400
Lys Glu Gln Asp Lys Leu Gln Asn His Leu Ile Gln Leu Arg Glu Asp
      405                      410                      415
Glu Ala Glu Ala Glu Asp Asn Leu Leu Arg Val Gln Ser Lys Lys Glu
      420                      425                      430
Glu Val Tyr Arg Arg Leu Leu Ala Ser Asn Leu Thr Ser Val Pro Glu
      435                      440                      445
Arg Phe Ile Ile Met Lys Asn Glu Ile Asp Asn Glu Val Arg Glu Val
      450                      455                      460
Asn Glu Gln Phe Arg Glu Arg Pro Ile His Val Lys Gln Leu Lys Asp
465                      470                      475                      480
Lys Val Ala Lys Ile Val Ile Gln Met Asn Thr Phe Glu Asp Glu Ala
      485                      490                      495
Asn Asp Val Leu Val Asn Ala Val Tyr Ala Glu Lys Leu Ile Gln Tyr
      500                      505                      510
Gly Asn Arg Tyr Arg Lys Asp His His His Val Asp Lys Ser Leu Asn
      515                      520                      525
Glu Ala Glu Arg Leu Phe Lys Asn Asn Arg Tyr Lys Arg Ala Ile Glu
      530                      535                      540
Ile Ala Glu Glu Ala Leu Glu Ser Val Glu Pro Gly Ile Thr Lys His
545                      550                      555                      560
Ile Glu Glu Gln Val Ile Lys Glu
      565

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<210> 5955

<211> 41

<212> PRT

<213> S.epidermidis

<400> 5955

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Pro Thr Trp Tyr Trp Gly Ile Leu Leu Gly Asn Arg Phe Thr Ile Val
1                      5                      10                      15
Lys Ser Gly Phe Pro Glu Met Val Ile Ile Trp Leu Lys Ser Phe Leu
      20                      25                      30

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Thr Ile Asp Thr Ile Ser Ser Ser Val
35 40

<210> 5956

<211> 370

<212> PRT

<213> S.epidermidis

<400> 5956

Lys Leu Tyr Leu Ile Ser Ile Glu Leu Ile Tyr His His Met Met Glu
1 5 10 15
Val His Tyr Met Thr Lys Ile Lys Glu Ile Lys Lys Val Leu Gln Lys
20 25 30
Glu Asp Ala Asp Ala Ala Trp Ile Thr Thr Pro Leu Asn Ile Phe Tyr
35 40 45
Phe Thr Gly Tyr Arg Ser Glu Pro His Glu Arg Leu Phe Ala Leu Leu
50 55 60
Ile Pro Ser Asn Glu Glu Pro Val Leu Phe Cys Pro Lys Met Glu Val
65 70 75 80
Glu Glu Val Lys Gln Ser Pro Phe Lys Gly Lys Ile Ile Gly Tyr Leu
85 90 95
Asp Thr Glu Asn Pro Phe Asp Lys Tyr Ser Lys Thr Phe Ser Lys Met
100 105 110
Leu Ile Glu Ser Glu His Leu Thr Val Lys Arg Gln Arg Glu Leu Thr
115 120 125
Lys Ala Phe Asn Ile Glu His Tyr Gln Asp Val Asp Gln Ser Ile Lys
130 135 140
Asp Leu Arg Asn Ile Lys Ser Glu Asp Glu Ile Ile Asn Ile Lys Lys
145 150 155 160
Ala Ala Ala Leu Ala Asp Lys Cys Ile Glu Ile Gly Lys Ser Phe Leu
165 170 175
Lys Glu Gly Val Glu Glu Arg Glu Val Val Asn His Ile Glu Asn Glu
180 185 190
Ile Lys Lys Tyr Gly Val Asn Glu Met Ser Phe Asp Thr Met Val Leu
195 200 205
Phe Gly Asp His Ala Ala Ser Pro His Gly Thr Pro Gly Asp Arg Lys
210 215 220
Leu Gln Gln Asn Glu Phe Val Leu Phe Asp Leu Gly Val Val Tyr His
225 230 235 240
His Tyr Cys Ser Asp Met Thr Arg Thr Ile His Phe Gly Thr Pro Asn
245 250 255
Lys Glu Ala Gln Asn Ile Tyr Asn Ile Val Leu Lys Ala Glu Thr Glu
260 265 270
Ala Ile Lys Ser Ile Lys Pro Gly Val Thr Ile Lys Asp Ile Asp Lys
275 280 285
Ile Ala Arg Asp Ile Ile Glu Glu Ala Gly Tyr Gly Asp Tyr Phe Pro
290 295 300
His Arg Leu Gly His Gly Leu Gly Leu Glu Glu His Glu Tyr Gln Asp
305 310 315 320
Ile Ser Ser Val Asn Asn Gln Leu Glu Ala Gly Met Val Ile Thr
325 330 335
Ile Glu Pro Gly Ile Tyr Val Pro His Val Ala Gly Ile Arg Ile Glu
340 345 350
Asp Asp Ile Leu Val Thr Glu Asn Gly Tyr Glu Ile Leu Thr Gln Tyr
355 360 365
Glu Lys

Tyr Arg Leu Pro Asn Glu Asn Glu Leu Ser Glu Leu Lys Glu Lys Leu
 65 70 75 80
 Phe Asp Tyr Met Thr Leu Asn Asn Arg Val Tyr Lys His Phe Glu Glu
 85 90 95
 Tyr Val Thr Asp His Val His Pro Met Thr Ala Leu Arg Thr Ser Val
 100 105 110
 Ser Tyr Val Ala His Phe Asp Pro Glu Ala Glu Asn Glu Ser Asp Glu
 115 120 125
 Asn Lys Tyr Asp Arg Ala Ile Arg Ile Gln Ala Lys Ile Ala Ser Leu
 130 135 140
 Val Thr Ala Phe Ala Arg Val Arg Asp Gly Lys Glu Pro Val Lys Pro
 145 150 155 160
 Asn Ser Glu Leu Ser Tyr Ala Ala Asn Phe Leu Tyr Met Leu Arg Gly
 165 170 175
 Glu Leu Pro Thr Glu Val Glu Val Glu Ala Phe Asn Lys Ala Leu Ile
 180 185 190
 Leu His Ala Asp His Glu Leu Asn Ala Ser Ala Phe Thr Ala Arg Cys
 195 200 205
 Ala Val Ser Ser Leu Ser Asp Met Tyr Ser Gly Val Val Ala Ala Ile
 210 215 220
 Gly Ser Leu Lys Gly Pro Leu His Gly Gly Ala Asn Glu Arg Val Met
 225 230 235 240
 Ser Met Leu Lys Glu Ile Gly Ser Ile Asp Asn Val Asp His Tyr Leu
 245 250 255
 Asp Glu Arg Phe Ala Asn Lys Asp Lys Ile Met Gly Phe Gly His Arg
 260 265 270
 Val Tyr Lys Asp Gly Asp Pro Arg Ala Lys Tyr Leu Arg Glu Met Ser
 275 280 285
 Arg Lys Ile Thr Glu Glu Thr Gly Gln Ser Glu Leu Phe Glu Met Ser
 290 295 300
 Leu Ala Ile Glu Lys Arg Met Lys Glu Glu Lys Gly Leu Ile Pro Asn
 305 310 315 320
 Val Asp Phe Phe Ser Ala Thr Val Tyr His Ser Met Asn Ile Pro His
 325 330 335
 Asp Leu Phe Thr Pro Ile Phe Ala Val Ser Arg Thr Ser Gly Trp Ile
 340 345 350
 Ala His Ile Leu Glu Gln Tyr Arg Asp Asn Arg Ile Met Arg Pro Arg
 355 360 365
 Ala Lys Tyr Ile Gly Glu Gln Asn Arg Lys Tyr Val Ser Ile Glu Glu
 370 375 380
 Arg Pro
 385

<210> 5960

<211> 44

<212> PRT

<213> S.epidermidis

<400> 5960

Asn Ser Ile Gln Tyr Val Trp Phe Ala Ile Ile Ile Leu Ile Gln Asn
 1 5 10 15
 Ile Leu Lys Gly Ala Ile Arg Lys Cys Gly Ser Gly Lys Gln Lys Met
 20 25 30
 Thr Gln Lys Ala Leu Leu Ser Leu Leu Ile Ile Phe
 35 40

Pro Ile Ser Lys Leu Thr Lys Asp Gln Ala Met Tyr His Phe Leu Ser
 405 410 415
 Gly Phe Thr Ser Lys Leu Ala Gly Thr Glu Arg Gly Val Thr Glu Pro
 420 425 430
 Gln Pro Ser Phe Ser Thr Cys Phe Gly Ala Pro Phe Leu Pro Leu Ser
 435 440 445
 Pro Thr Lys Tyr Ala Asp Leu Leu Gly Asn Leu Ile Asp Ile His Asp
 450 455 460
 Val Asp Val Tyr Leu Val Asn Thr Gly Trp Thr Gly Gly Lys Tyr Gly
 465 470 475 480
 Ile Gly Arg Arg Ile Ser Leu His Tyr Thr Arg Glu Met Val Asp Gln
 485 490 495
 Ala Ile Ser Gly Lys Leu Lys Asn Thr Lys Tyr Ile Lys Asp Asp Thr
 500 505 510
 Phe Gly Leu Asn Ile Pro Val Gln Ile Asp Ser Ile Pro Thr Thr Ile
 515 520 525
 Leu Asn Pro Ile Asn Ala Trp Asn Asn Lys Asp Asn Tyr Lys Ala Gln
 530 535 540
 Ala Tyr Asp Leu Ile Gln Arg Phe Asn Asn Asn Phe Lys Lys Phe Gly
 545 550 555 560
 Lys Glu Val Glu His Ile Ala Asn Lys Gly Ala Phe Asn Gln
 565 570

<210> 5962

<211> 53

<212> PRT

<213> S.epidermidis

<400> 5962

Phe Lys Ile Gln Ile Phe Asn Tyr Arg Phe Phe Ser Ile Ser Pro Cys
 1 5 10 15
 Lys Met Phe Asn Phe Tyr Cys His Lys Ala Pro Pro Leu Thr Leu Leu
 20 25 30
 Tyr Gln Lys Lys Leu Tyr Arg Pro Lys Asn Asn Leu Tyr Asn Asp Val
 35 40 45
 Val Leu Lys Asn Glu
 50

<210> 5963

<211> 330

<212> PRT

<213> S.epidermidis

<400> 5963

Arg Ser Tyr Gln Leu Met Lys Leu Met Asn Lys Ile Ile Val Pro Val
 1 5 10 15
 Thr Ala Ser Ala Leu Leu Leu Gly Ala Cys Gly Ser Asn Ala Thr Glu
 20 25 30
 Ser Lys Asp Asn Thr Leu Ile Ser Lys Ala Gly Asp Val Lys Val
 35 40 45
 Ala Asp Val Met Lys Lys Met Gly Lys Glu Gln Ile Ala Asn Thr Ser
 50 55 60
 Phe Ser Ile Val Leu Asn Lys Val Leu Ala Asp Lys Tyr Lys Asp Lys
 65 70 75 80
 Val Asp Thr Lys Asp Ile Asp Lys Asp Ile Lys Lys Glu Glu Lys Gln
 85 90 95

Tyr Gly Gly Lys Asp Gln Phe Glu Ser Met Leu Lys Gln Gln Gly Met
 100 105 110
 Ser Leu Asp Asp Tyr Lys Glu Gln Lys Lys Leu Ser Ala Tyr Gln Lys
 115 120 125
 Gln Leu Leu Leu Asp Lys Val Asn Val Ser Asp Lys Glu Ile Lys Glu
 130 135 140
 Asn Ser Lys Lys Thr Ser His Ile Leu Ile Lys Val Lys Ser Lys Ser
 145 150 155 160
 Ser Asp Lys Glu Gly Leu Ser Asp Lys Lys Ala Lys Glu Lys Ala Glu
 165 170 175
 Lys Ile Gln Lys Glu Val Glu Lys Asn Pro Asn Lys Phe Gly Glu Ile
 180 185 190
 Ala Lys Lys Glu Ser Met Asp Ser Ser Ser Ala Lys Lys Asp Gly Ser
 195 200 205
 Leu Gly Tyr Val Ile Lys Gly Gln Met Val Asp Ser Phe Glu Lys Ala
 210 215 220
 Leu Phe Lys Leu Lys Glu Gly Glu Val Ser Lys Val Val Lys Thr Asp
 225 230 235 240
 Tyr Gly Tyr His Ile Ile Lys Ala Asp Lys Glu Thr Asp Phe Asn Ser
 245 250 255
 Glu Lys Ser Asn Ile Lys Gln Lys Leu Ile Glu Glu Lys Val Gln Lys
 260 265 270
 Lys Pro Lys Leu Leu Thr Asp Ala Tyr Lys Glu Leu Leu Lys Glu Tyr
 275 280 285
 Lys Val Asp Tyr Lys Asp Arg Asp Ile Lys Lys Ala Ile Glu Asp Ser
 290 295 300
 Ile Leu Asp Pro Asp Lys Ile Lys Gln Gln Gln Gln Gln Ser Gln
 305 310 315 320
 Gly Gly Ser Gly Leu Thr Asn Ser Gly Ser
 325 330

<210> 5964

<211> 456

<212> PRT

<213> S.epidermidis

<400> 5964

Gly Ser Cys Leu Met Ala Glu Asn Leu Gln Arg Glu Leu Ser Asn Arg
 1 5 10 15
 His Val Gln Leu Ile Ala Ile Gly Gly Ala Ile Gly Thr Gly Leu Phe
 20 25 30
 Leu Gly Ala Gly Gln Thr Ile Ala Met Thr Gly Pro Ser Ile Leu Leu
 35 40 45
 Thr Tyr Ile Ile Ile Gly Phe Met Leu Phe Met Phe Met Arg Gly Leu
 50 55 60
 Gly Glu Ile Ile Ile Gln Asn Thr Asn Phe Lys Ser Phe Ala Asp Val
 65 70 75 80
 Thr Asn Thr Tyr Ile Gly Pro Phe Ala Gly Phe Val Thr Gly Trp Thr
 85 90 95
 Tyr Trp Leu Cys Trp Ile Ile Thr Gly Met Ala Glu Val Thr Ala Val
 100 105 110
 Ala Lys Tyr Ile Ser Phe Trp Phe Pro Asp Ile Pro Asn Trp Ile Ser
 115 120 125
 Ala Leu Phe Cys Val Leu Ile Leu Met Ser Phe Asn Leu Leu Ser Ala
 130 135 140
 Lys Leu Phe Gly Glu Leu Glu Phe Trp Phe Ala Ile Ile Lys Ile Val

145 150 155 160
 Thr Ile Ile Ala Leu Ile Val Ile Gly Val Ile Met Ile Leu Phe Ala
 165 170 175
 Phe Lys Thr Pro Phe Gly Asn Thr Ser Leu Thr His Leu Tyr Gln His
 180 185 190
 Gly Ile Phe Pro Lys Gly Ala Ser Gly Phe Phe Met Ser Phe Gln Met
 195 200 205
 Ala Leu Phe Ser Phe Val Gly Ile Glu Met Ile Gly Val Thr Ala Arg
 210 215 220
 Arg Asn Gln Arg Ser Arg Lys Thr Ile Pro Lys Ala Ile Asn Ser Val
 225 230 235 240
 Pro Ile Arg Ile Leu Ile Phe Tyr Val Gly Ala Leu Ala Val Ile Met
 245 250 255
 Ser Ile Ile Pro Trp Asp Lys Val Asp Pro Asp Asn Ser Pro Phe Val
 260 265 270
 Arg Leu Phe Ala Leu Ile Gly Ile Pro Phe Ala Ala Gly Ile Ile Asn
 275 280 285
 Phe Val Val Leu Thr Ala Ala Ala Ser Ser Cys Asn Ser Gly Ile Phe
 290 295 300
 Ser Asn Ser Arg Met Leu Tyr Gly Leu Ser Asn Gln Asn Gln Ala Pro
 305 310 315 320
 Pro Thr Phe Ala Ser Thr Asn Lys His Gly Val Pro His Lys Ala Ile
 325 330 335
 Ile Ala Ser Ser Ala Leu Leu Leu Ile Ala Ala Leu Leu Asn Tyr Ile
 340 345 350
 Phe Pro Asp Ala Thr Leu Val Phe Thr Tyr Val Thr Thr Ile Ser Thr
 355 360 365
 Val Leu Phe Val Val Val Trp Ala Leu Ile Ile Ile Ala Tyr Ile Asn
 370 375 380
 Tyr Ser Arg Lys Asn Pro Glu Leu His Lys Lys Ala Thr Tyr Lys Leu
 385 390 395 400
 Pro Gly Gly Gln Tyr Met Gly Tyr Leu Ile Leu Ile Phe Phe Val Phe
 405 410 415
 Val Phe Ala Leu Leu Phe Ile Asn Val Asp Thr Arg Arg Ala Ile Tyr
 420 425 430
 Cys Thr Pro Ile Trp Phe Ile Leu Leu Gly Leu Met Tyr Leu Arg Tyr
 435 440 445
 Lys Lys Ala Asp Lys Glu Ser Arg
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<210> 5965

<211> 83

<212> PRT

<213> S.epidermidis

<400> 5965

Pro Leu Asp Gln Gly Ala Met Ala Pro Gln Val Gly Phe Glu Pro Thr
 1 5 10 15
 Thr Asp Arg Leu Thr Ala Asp Ser Ser Thr Thr Glu Leu Leu Trp Ile
 20 25 30
 Asn Lys Met Glu Arg Val Met Gly Ile Glu Pro Thr Thr Ser Ala Trp
 35 40 45
 Lys Ala Glu Val Leu Pro Leu Asn Tyr Thr Arg Leu Met Lys Tyr Asp
 50 55 60
 Tyr Gly Ala Val Glu Gly Asn Arg Thr Leu Glu Cys Arg Asn His Asn
 65 70 75 80

Pro Met Arg

<210> 5966

<211> 43

<212> PRT

<213> S.epidermidis

<400> 5966

Thr	Gly	Gly	Gln	Ile	Asn	Asn	Lys	Ile	Ile	Ala	Lys	Ile	Val	Gln	Lys
1				5				10						15	
Asn	Ala	Val	Met	Ile	Gly	Thr	Ser	Arg	Phe	Pro	Leu	Lys	Asn	Asp	Lys
		20					25						30		
Ala	Ile	Gly	Lys	Phe	Val	Ser	Leu	Asn	Leu	Leu					
		35					40								

<210> 5967

<211> 43

<212> PRT

<213> S.epidermidis

<400> 5967

Thr	Leu	Leu	Gln	Tyr	Thr	Ile	Ile	Phe	Ile	Lys	Leu	Lys	His	Ser	Asn
1				5				10						15	
Phe	His	Ser	Ile	Leu	Asn	Ser	Ile	Phe	Lys	Ile	Lys	Ala	Asn	Asn	Ser
		20					25						30		
Leu	Thr	Phe	Gln	Gly	His	Val	Ile	Asn	Lys	Leu					
		35					40								

<210> 5968

<211> 456

<212> PRT

<213> S.epidermidis

<400> 5968

Met	Gly	Leu	Gln	Thr	Tyr	Glu	Tyr	Gly	Leu	Lys	Pro	Gln	Asp	Gly	Phe
1				5				10						15	
Glu	Val	Ile	Thr	His	Phe	Glu	Phe	Thr	Ser	Gln	His	Leu	Asp	Ile	Leu
		20					25						30		
Asn	Arg	Leu	Phe	Thr	Pro	Leu	Ile	Gly	Val	Glu	Ser	Ile	Gly	Leu	Tyr
		35					40						45		
His	Phe	Met	Ser	Gln	Phe	Ile	Asp	Glu	Ser	Gln	Gln	Leu	Gly	Leu	Thr
	50					55					60				
His	Tyr	Ile	Phe	Met	Asn	Glu	Leu	Lys	Ile	Asn	Leu	Leu	Asp	Phe	Arg
	65				70				75					80	
Glu	Gln	Met	Asp	Asn	Leu	Glu	Ala	Ile	Gly	Leu	Ile	Lys	Thr	Phe	Val
			85					90						95	
Arg	His	Glu	Lys	Lys	Tyr	Ser	His	Phe	Val	Tyr	Glu	Leu	Ile	Gln	Pro
		100						105					110		
Pro	Thr	Ala	Tyr	Gln	Phe	Phe	Asn	Asp	Pro	Met	Leu	Ser	Val	Phe	Leu
		115					120					125			
Phe	Ser	Glu	Val	Asp	Lys	Lys	Arg	Tyr	Gln	Ala	Leu	Lys	Ser	Tyr	Phe
		130				135					140				
Glu	Lys	Asp	Glu	Lys	Asp	Leu	Ser	Lys	Tyr	Gln	Gln	Thr	Thr	Arg	Lys
					150					155				160	
Phe	Thr	Glu	Val	Phe	Asn	Val	Pro	Lys	Lys	Val	Asn	Val	Ser	Asp	Gln

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      165      170      175
Ile Asn Leu Lys Gln Ile Lys His Tyr Asp Gly Ile Asp Leu Ser Asn
      180      185      190
Glu Thr Phe Asp Phe Glu Met Leu Arg Gln Met Leu Asn His His Phe
      195      200      205
Ile Ser Asn Glu Ile Ile Asp Lys Glu Ala Lys Asn Leu Ile Ile Gln
      210      215      220
Leu Ala Thr Leu Tyr Gly Ile Thr Glu Asp Gly Met Lys Asn Val Ile
      225      230      235
Leu Ser Ser Ile Thr Ser Ala Gln Gln Leu Ser Phe Glu Glu Met Arg
      245      250      255
Lys Lys Ala Arg Thr Tyr Tyr Leu Ile Glu His Asp Asn Gln Leu Pro
      260      265      270
Lys Leu Glu His Gln Thr Asn Lys Ile Asn Asp Glu Lys Lys Asp Arg
      275      280      285
Gln Ala Glu Asp Thr Thr Asn Asp Trp Leu Gln Leu Leu Asp Glu Thr
      290      295      300
Ser Pro Ile Asp Met Leu Ala Ser Trp Ser Asp Ser Glu Pro Thr Gln
      305      310      315
Ser Gln Lys Ser Met Ile Glu Glu Leu Ile Asn Arg Glu Lys Met Asn
      325      330      335
Phe Gly Val Ile Asn Ile Leu Leu Gln Phe Val Met Leu Lys Glu Asp
      340      345      350
Met Lys Leu Pro Lys Ser Tyr Ile Phe Glu Ile Ala Ser Asn Trp Lys
      355      360      365
Lys Ile Gly Ile Ser Asn Ala Lys Gln Ala Tyr Glu Tyr Ala Leu Gln
      370      375      380
Val Asn Gln Pro Lys Asn Tyr Glu Thr His Ser Asn Asp Lys Arg Gln
      385      390      395
Asn Asn Arg Gly Arg Gln Asn Gln Phe Leu Ser Lys Glu Lys Thr Pro
      405      410      415
Lys Trp Leu Gln Asn Arg Asp Asp Gln Glu Glu Asn Lys Glu Ile Asn
      420      425      430
Asp Asp Thr Leu Glu Glu Asp Arg Gln Ala Phe Leu Glu Lys Leu Asn
      435      440      445
Gln Lys Trp Lys Glu Glu Asp Asn
      450      455

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<210> 5969

<211> 174

<212> PRT

<213> S.epidermidis

<400> 5969

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Thr Pro Ala Gln Lys Glu Asp Glu Lys Phe Met Ser Ile Glu Asn Phe
1      5      10
Val Asn Leu Lys Lys Tyr Val Ser Asp Pro Pro Ile Gln Ser Tyr Val
      20      25      30
Phe Val Tyr Ile Leu Ile Val Thr Gly Gly Arg Phe Gly Glu Val Gln
      35      40      45
Lys Leu Ser Arg Ser Asp Leu Asp Tyr Lys Asn Asn Thr Ile His Leu
      50      55      60
Pro Gly Thr Lys Thr Glu Thr Ser Asp Arg Thr Val Asp Ile Pro Ala
      65      70      75      80
Ala Asp Met Asn Met Leu Arg Lys Thr Leu Ser Lys Met Pro Val Ser
      85      90      95

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Leu Ser Asn Gln Leu Phe Ser Thr Gly Val Gly Leu Ile Thr His Asn
 100 105 110
 Ala Val Ser Lys Val Leu Gln Lys Phe Cys Leu Glu Asn Lys Ile Gly
 115 120 125
 Lys Tyr Thr Leu His Ser Ile Arg His Thr His Cys Ser Tyr Leu Leu
 130 135 140
 Leu Asn Asp Val Ser Ile Tyr Tyr Thr Ser Lys Arg Leu Gly Tyr Lys
 145 150 155 160
 Asn Ile Lys Thr Thr Met Asp Ala Tyr Phe Ala Ser Ile Arg
 165 170

<210> 5970
 <211> 66
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 <213> S.epidermidis

<400> 5970
 Arg Ile Lys Gln Pro Gln Val Leu Gln Gln Leu Ser Gln Leu Leu Ser
 1 5 10 15
 Val Lys Lys Asn Pro Leu Lys Gln Arg Ser Phe Ile Ser Phe Asn Asn
 20 25 30
 Ser Asn Tyr Asn Arg Lys Lys Ala Tyr Phe Arg His Ile Phe Tyr Asn
 35 40 45
 Tyr Leu Phe Ser Ile Leu Gln Val Ile Glu Phe Gln Gln His Leu Leu
 50 55 60
 Lys His
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<210> 5971
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 5971
 Phe Glu Leu Gln His Leu Lys Ile Asn Leu Leu Ser Met Ile Val Leu
 1 5 10 15
 Leu Phe Tyr Ile Phe Thr Ser Lys Ser Cys Ile Phe Lys Met Ile Gln
 20 25 30
 Phe Ser Phe His Gly Leu Thr Tyr Val Leu Asn Ile Tyr Ser Ser Met
 35 40 45
 Thr Ser His Lys Ile Lys
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<210> 5972
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 5972
 Lys Tyr Phe Asn Val Lys Leu His Met Asn Thr Lys Tyr Phe Gly Glu
 1 5 10 15
 Thr Leu Glu Gly Thr Gly Gln Ala Glu Asp Tyr Arg Leu Lys Leu Ser
 20 25 30
 Pro Lys Lys Ala Ser Gln Gln Tyr Glu Val Leu
 35 40

<210> 5973
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 5973

Lys	Phe	Ile	Lys	Ile	Arg	His	Ile	Pro	Thr	Leu	Lys	Glu	Lys	Ile	Ile
1			5						10					15	
Lys	Thr	Ile	Pro	Pro	Ile	Lys	Met	Glu	Glu	Leu	Phe	Cys	Leu	Ile	Gly
			20					25					30		
Leu	Asp	Asp	Arg	Leu	Ile	Tyr	Ile	Cys	Asp						
		35					40								

<210> 5974
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 <213> S.epidermidis

<400> 5974

Gly	Ala	Val	Lys	Val	Met	Gln	Tyr	Asp	His	Leu	Leu	Val	Arg	Tyr	Gly
1			5						10					15	
Glu	Leu	Thr	Leu	Lys	Gly	Thr	Asn	Arg	Lys	Met	Phe	Val	Asn	Gln	Leu
			20					25					30		
Lys	Asp	Asn	Val	Lys	Arg	Ala	Leu	Ile	Pro	Leu	Ser	Gly	Tyr	His	Val
		35					40					45			
Lys	Gly	Lys	Arg	Asp	Arg	Met	Tyr	Ile	Glu	Leu	Ser	Pro	Glu	Ala	Asp
	50					55					60				
Ile	Asn	Glu	Ile	Ile	Gln	Arg	Leu	Ser	Lys	Val	Tyr	Gly	Ile	Lys	Ser
65					70					75					80
Ile	Ser	Pro	Val	Ile	Lys	Ile	Asp	Lys	Asn	Glu	Glu	Lys	Ile	Asn	Gln
				85					90					95	
Ser	Ala	Ile	Gln	Leu	Ser	His	Asp	Phe	Glu	Lys	Gly	Ser	Thr	Phe	Lys
			100					105						110	
Val	Asp	Val	Lys	Arg	Val	Asp	Lys	Ser	Phe	Arg	Leu	Asp	Thr	Tyr	Glu
		115					120					125			
Leu	Gln	Arg	Gln	Val	Gly	Gly	Ala	Ile	Leu	Lys	Lys	Asn	Asn	Asn	Ile
	130					135					140				
Thr	Val	Asn	Val	Lys	Asn	Pro	Asp	Tyr	Glu	Ile	Lys	Ile	Glu	Val	Arg
145					150					155					160
Met	Asp	Ala	Ile	Tyr	Ile	Tyr	Glu	Lys	Val	Ile	Ala	Gly	Ala	Gly	Gly
			165					170						175	
Leu	Pro	Val	Gly	Thr	Gly	Gly	Lys	Thr	Leu	Leu	Met	Leu	Ser	Gly	Gly
		180					185						190		
Ile	Asp	Ser	Pro	Val	Ala	Gly	Ile	Glu	Val	Met	Lys	Arg	Gly	Val	Thr
	195						200					205			
Val	Glu	Ala	Ile	His	Phe	His	Ser	Pro	Pro	Phe	Thr	Ser	Glu	Lys	Ala
	210					215					220				
Lys	Asp	Lys	Val	Ile	Glu	Leu	Thr	Arg	Ile	Leu	Ala	Glu	Arg	Val	Gly
225					230					235					240
Pro	Ile	Lys	Leu	His	Leu	Val	Pro	Phe	Thr	Glu	Ile	Gln	Lys	Gln	Ile
				245					250					255	
Asn	Lys	Val	Val	His	Pro	Arg	Tyr	Thr	Met	Thr	Ser	Thr	Arg	Arg	Met
		260						265					270		
Met	Met	Arg	Ile	Ser	Asp	Lys	Val	Val	His	Gln	Ile	Asn	Ala	Asn	Ala
		275					280					285			
Ile	Val	Asn	Gly	Glu	Asn	Leu	Gly	Gln	Val	Ala	Ser	Gln	Thr	Leu	Lys

290	295	300
Ser Met Tyr Ala Ile Asn His Val Thr Ala Thr Pro Val Leu Arg Pro		
305	310	315
Leu Leu Thr Leu Asp Lys Glu Asp Ile Ile Lys Lys Ala Lys Glu Leu		
	325	330
Gly Thr Phe Glu Thr Ser Ile Gln Pro Tyr Glu Asp Cys Cys Thr Ile		
	340	345
Phe Thr Pro Lys Asn Pro Val Thr Glu Pro Asp Phe Asp Lys Val Ile		
	355	360
Lys Tyr Glu Ser Val Phe Asn Phe Asp Glu Met Ile Glu Asn Ala Val		
	370	375
Glu Asn Ile Glu Thr Leu Thr Ile Asp Gln Asn Tyr Lys Ser Ala Lys		
385	390	395
Glu Gln Ser Thr Asp Ser Leu Ile Lys Asp Leu Phe		
	405	410

<210> 5975

<211> 345

<212> PRT

<213> S.epidermidis

<400> 5975

Trp Asn Val Lys Lys Ile Tyr Gly Asn Leu Glu Leu Lys Ile Asn Leu	
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Val Lys Glu Arg Tyr Val Val Met Lys Lys Ile Ala Val Leu Thr Ser	
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Gly Gly Asp Ser Pro Gly Met Asn Ala Ala Val Arg Ala Val Thr Arg	
	35
Thr Ala Ile Tyr Asn Asn Ile Glu Val Tyr Gly Val Tyr Gln Gly Tyr	
	50
Gln Gly Leu Leu Asp Asp Asp Ile His Lys Leu Glu Leu Gly Ser Val	
65	70
Gly Asp Thr Ile Gln Arg Gly Gly Thr Phe Leu Phe Ser Ala Arg Cys	
	85
Pro Gln Phe Lys Glu Glu Asp Val Arg Lys Lys Ala Ile Glu Asn Leu	
	100
Arg Lys Arg Gly Ile Glu Gly Leu Val Val Ile Gly Gly Asp Gly Ser	
	115
Tyr Arg Gly Ala Gln Arg Ile Ser Glu Glu Cys Lys Glu Ile Gln Thr	
	130
Ile Gly Ile Pro Gly Thr Ile Asp Asn Asp Ile Asn Gly Thr Asp Phe	
145	150
Thr Ile Gly Phe Asp Thr Ala Leu Asn Thr Ile Ile Glu Ser Val Asp	
	165
Lys Ile Arg Asp Thr Ala Ser Ser His Ala Arg Thr Phe Ile Val Glu	
	180
Val Met Gly Arg Asp Cys Gly Asp Leu Ala Leu Trp Ala Gly Leu Ser	
	195
Val Gly Ala Glu Thr Ile Val Leu Pro Glu Val Asn Thr Asp Ile Lys	
	210
Asp Val Ala Glu Lys Ile Glu Gln Gly Ile Lys Arg Gly Lys Lys His	
225	230
Ser Ile Val Met Val Ala Glu Gly Cys Met Ser Gly Gln Glu Cys Ala	
	245
Asp Glu Leu Thr Lys Tyr Ile Asn Ile Asp Thr Arg Val Ser Val Leu	
	260

Gly His Ile Gln Arg Gly Gly Ser Pro Ser Gly Ala Asp Arg Val Leu
 275 280 285
 Ala Ser Arg Leu Gly Gly Tyr Ala Val Glu Leu Leu Lys Gln Gly Glu
 290 295 300
 Thr Ala Lys Gly Val Gly Ile Arg Asn Asn Gln Leu Thr Ser Thr Pro
 305 310 315 320
 Phe Asp Glu Ile Phe Ala Glu Ser Asp Arg Lys Phe Asn Ser Gln Met
 325 330 335
 Tyr Glu Leu Ala Lys Glu Leu Ser Ile
 340 345

<210> 5976

<211> 128

<212> PRT

<213> S.epidermidis

<400> 5976

Ile Arg Thr Asn Asp Asn Ala Ile Met Ile Ser Gly Phe Lys Ile Phe
 1 5 10 15
 Ala Gly Met Tyr Val Ala Met Ile Ala Pro Pro Pro Glu Ala Thr Asn
 20 25 30
 Ile Ser Gly Asn Ile Phe Pro Thr Ile Phe Lys Ser Thr Leu Pro Glu
 35 40 45
 Arg Lys Asn Phe Asn Ala Leu Val Asn Val Leu Lys Glu Leu Ala Asn
 50 55 60
 Leu Phe Val Pro Lys Ala Thr Asp Gly Gly Lys Pro Thr Ala Ser Asn
 65 70 75 80
 Ala Gly Val Glu Ile Ser Pro Pro Pro Pro Thr Thr Glu Ser Thr Asn
 85 90 95
 Glu Ala Ile Lys Pro Lys Ala Thr Ile Ile Asn Ile Ile Asp Lys Phe
 100 105 110
 Gln Ser Ile Leu Ser Leu Thr Pro Leu Phe Leu Leu His Tyr Glu Phe
 115 120 125

<210> 5977

<211> 397

<212> PRT

<213> S.epidermidis

<400> 5977

Glu Glu Tyr Asn Met Gln Phe Asp Thr Ile Glu Leu Ala Ile Glu Ala
 1 5 10 15
 Leu Arg Asn Gly Glu Ser Ile Ile Val Val Asp Asp Glu Asp Arg Glu
 20 25 30
 Asn Glu Gly Asp Leu Val Ala Val Thr Glu Trp Met Asp Asp Asn Thr
 35 40 45
 Ile Asn Phe Met Ala Arg Glu Gly Arg Gly Leu Ile Cys Ala Pro Ile
 50 55 60
 Asp Lys Ser Ile Ala Glu Arg Leu Lys Leu Gln Ser Met Glu Gln Asn
 65 70 75 80
 Asn Thr Asp Ile Tyr Gly Thr His Phe Thr Val Ser Ile Asp His Tyr
 85 90 95
 Lys Thr Thr Thr Gly Ile Ser Ala His Glu Arg Thr Gln Thr Ala Arg
 100 105 110
 Ala Leu Ile Asp Glu Asn Thr Asn Pro Glu Asp Phe His Arg Pro Gly
 115 120 125

His	Leu	Phe	Pro	Leu	Ile	Ala	Lys	Glu	Asn	Gly	Val	Leu	Thr	Arg	Asn
130						135					140				
Gly	His	Thr	Glu	Ala	Ala	Val	Asp	Leu	Ala	Arg	Leu	Thr	Gly	Ala	Gln
145					150					155					160
Pro	Ala	Gly	Val	Ile	Cys	Glu	Ile	Met	Asn	Asp	Asp	Gly	Thr	Met	Ala
				165					170						175
Lys	Gly	Glu	Asp	Leu	Gln	Ser	Phe	Lys	Glu	Arg	His	His	Leu	Lys	Met
			180					185					190		
Ile	Thr	Ile	Lys	Ser	Leu	Val	Ala	Phe	Arg	Lys	Ala	Val	Glu	Leu	Asn
		195					200					205			
Val	Asn	Leu	Lys	Ala	Lys	Val	Lys	Met	Pro	Thr	Asp	Phe	Gly	His	Phe
	210					215					220				
Asp	Met	Tyr	Gly	Phe	Thr	Thr	Asp	Tyr	Ser	Asp	Glu	Glu	Ile	Val	Ala
225					230					235					240
Ile	Val	Lys	Gly	Asp	Leu	Lys	Ser	Asn	Pro	Asn	Val	Arg	Met	His	Ser
				245					250						255
Ala	Cys	Leu	Thr	Gly	Asp	Ile	Phe	His	Ser	Gln	Arg	Cys	Asp	Cys	Gly
			260					265					270		
Ala	Gln	Leu	Glu	Ala	Ser	Met	Lys	Tyr	Ile	Asp	Glu	His	Gly	Gly	Met
		275					280					285			
Ile	Ile	Tyr	Leu	Pro	Gln	Glu	Gly	Arg	Gly	Ile	Gly	Leu	Ile	Asn	Lys
	290					295					300				
Leu	Arg	Ala	Tyr	Glu	Leu	Ile	Glu	Lys	Gly	Tyr	Asp	Thr	Val	Thr	Ala
305					310					315					320
Asn	Leu	Ala	Leu	Gly	Phe	Asp	Glu	Asp	Leu	Arg	Asp	Tyr	His	Val	Ala
				325					330					335	
Ala	Glu	Ile	Leu	Lys	Tyr	Phe	Asp	Ile	Ser	Glu	Ile	Asn	Leu	Leu	Ser
			340					345					350		
Asn	Asn	Pro	Lys	Lys	Phe	Glu	Gly	Leu	Glu	Asp	Tyr	Gly	Ile	Glu	Ile
		355					360					365			
Val	Asp	Arg	Ile	Glu	Leu	Ile	Val	Pro	Glu	Thr	Gln	Tyr	Asn	His	Ser
	370					375					380				
Tyr	Met	Glu	Thr	Lys	Lys	Asn	Lys	Met	Gly	His	Leu	Ile			
385					390					395					

<210> 5978

<211> 138

<212> PRT

<213> S.epidermidis

<400> 5978

Phe	Met	Tyr	Lys	His	Ile	Leu	Leu	Gly	Val	Asp	Thr	Gln	Ile	Lys	Asn
1				5					10					15	
Glu	Lys	Ala	Leu	Lys	Glu	Val	Ser	Arg	Leu	Ala	Gly	Glu	Gly	Thr	Ile
			20					25					30		
Val	Thr	Val	Leu	Asn	Ala	Ile	Asn	Glu	Gln	Asp	Ala	Gln	Ala	Ser	Ile
		35					40					45			
Arg	Ala	Gly	Val	His	Leu	Asp	Lys	Leu	Thr	Glu	Lys	Arg	Ser	Lys	Gly
	50					55					60				
Leu	Glu	Ser	Thr	Leu	Lys	Thr	Leu	Glu	Asp	Tyr	Gly	Ile	Asp	Tyr	Asp
65					70					75				80	
Glu	Val	Ile	Val	Arg	Gly	Asn	Ala	Lys	Asp	Glu	Leu	Leu	Lys	Phe	Ala
				85					90					95	
Asn	Ser	Gly	Lys	Tyr	Glu	Ile	Ile	Val	Leu	Ser	Asn	Arg	Lys	Ala	Glu
			100					105					110		
Glu	Asn	Lys	Lys	Phe	Val	Leu	Gly	Ser	Val	Ser	His	Lys	Val	Ala	Lys

115 120 125
 Arg Ala Thr Ile Pro Val Leu Ile Val Lys
 130 135

<210> 5979
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 5979
 Lys Phe Leu Leu Phe Thr Gln Lys Val Phe Met Leu Lys Ser Gln Val
 1 5 10 15
 Ser Val Gln Ile Lys His Leu Phe Leu His Ile Asn Lys Val Tyr Asp
 20 25 30
 Tyr Tyr Leu Thr Pro Ile Ala Ser Ile Thr Gln Met Ile Ile Phe Lys
 35 40 45
 Gln

<210> 5980
 <211> 295
 <212> PRT
 <213> S.epidermidis

<400> 5980
 Arg Lys Asp Asn Ile Met Pro Glu Leu Pro Glu Val Glu His Val Lys
 1 5 10 15
 Arg Gly Ile Glu Pro Phe Ile Lys Ser Ala Lys Ile Glu Lys Val Thr
 20 25 30
 Phe Ala Lys Asn Val Ile Asn Gly Lys Asn Asn Asn Arg Glu Thr Ile
 35 40 45
 Ile Lys Gly Met Glu Leu Asp Thr Phe Lys Lys Leu Thr Glu Gly Tyr
 50 55 60
 Val Ile Lys Lys Val Glu Arg Arg Ser Lys Tyr Ile Ile Phe Tyr Ile
 65 70 75 80
 Ala Asp His Asp Asp Asp Arg Ile Leu Val Ser His Leu Gly Met Ala
 85 90 95
 Gly Gly Phe Phe Val Val Asn Asn Leu Asp Glu Ile Ser Thr Pro Asn
 100 105 110
 Tyr Arg Lys His Trp Gln Val Ile Phe Asp Leu Asp Asn Lys Gln Lys
 115 120 125
 Leu Val Tyr Ser Asp Ile Arg Arg Phe Gly Glu Ile Arg Asn Ile Val
 130 135 140
 Asn Phe Asp Ser Tyr Pro Ser Leu Leu Glu Ile Ala Pro Glu Pro Phe
 145 150 155 160
 Glu Glu Val Ala Phe Glu His Tyr Leu Glu Cys Leu Thr Met Lys Lys
 165 170 175
 Tyr Lys Asn Lys Pro Ile Lys Gln Thr Ile Leu Asp His Arg Val Ile
 180 185 190
 Ala Gly Ala Gly Asn Ile Tyr Ala Cys Glu Ala Leu Phe Arg Ala Gly
 195 200 205
 Ile Thr Pro Asp Lys Ile Thr Asn Ser Leu Thr Lys Gln Glu Arg Lys
 210 215 220
 Ser Leu Phe Tyr Tyr Val Arg Glu Val Leu Glu Glu Gly Ile Lys Tyr
 225 230 235 240
 Gly Gly Thr Ser Ile Ser Asp Tyr Arg His Ala Asp Gly Lys Thr Gly

2583

				245					250					255			
Gln	Met	Gln	Leu	His	Leu	Asn	Val	Tyr	Lys	Gln	Lys	Lys	Cys	Lys	Val		
			260					265					270				
Cys	Gly	His	Ser	Ile	Glu	Thr	Lys	Val	Ile	Ala	Gly	Arg	Asn	Ser	His		
		275					280					285					
Phe	Cys	Pro	Asn	Cys	Gln	Arg											
	290					295											

<210> 5981
 <211> 200
 <212> PRT
 <213> S.epidermidis

<400> 5981																	
Ile	Ile	Arg	Asn	Glu	Tyr	Ser	His	Arg	Glu	Glu	Ala	Tyr	Ile	Met	Phe		
1			5						10				15				
Leu	Cys	Thr	Arg	Gln	Ile	Asp	Ile	His	Ala	Arg	Phe	Gly	Ile	Gln	Arg		
			20				25					30					
Ile	Ala	Phe	Leu	Ser	Leu	Val	Ala	Thr	Ile	Phe	Thr	Phe	Leu	Val	Ser		
		35				40					45						
Tyr	Glu	Val	Met	Tyr	Tyr	Phe	Leu	Asp	Thr	Pro	Leu	Ser	Asp	Arg	His		
		50				55				60							
Phe	Phe	Val	Leu	Ile	Val	Phe	Ile	Leu	Leu	Met	Tyr	Pro	Ile	His	Lys		
65				70					75					80			
Ile	Val	His	Leu	Leu	Phe	Phe	Leu	Pro	Tyr	Tyr	Lys	Ser	Phe	Lys	Ile		
			85					90					95				
His	Lys	Leu	Ser	Ser	Lys	Lys	Trp	Val	Pro	Tyr	Phe	Asn	Thr	Tyr	Val		
		100					105					110					
Asn	Thr	Pro	Val	His	Lys	Ile	Tyr	Phe	Cys	Ile	Asn	Leu	Ile	Leu	Pro		
		115				120					125						
Ile	Phe	Phe	Leu	Ser	Gly	Ile	Phe	Ile	Met	Leu	Ser	Ile	Tyr	Leu	Pro		
	130				135				140								
Gln	Tyr	Gly	His	Tyr	Phe	Met	Phe	Leu	Leu	Ser	Leu	Asn	Ile	Gly	Cys		
145				150					155					160			
Ser	Met	Met	Asp	Ile	Leu	Tyr	Leu	Lys	Ile	Leu	Leu	Phe	Ser	Asn	Asp		
			165					170					175				
Gly	His	Tyr	Val	Glu	Glu	His	Gln	Ser	Gly	Leu	His	Ile	Leu	Asn	Lys		
		180					185						190				
Val	Asp	Asn	Pro	Tyr	Ile	Gln	His										
	195					200											

<210> 5982
 <211> 48
 <212> PRT
 <213> S.epidermidis

<400> 5982																	
Tyr	Lys	Ser	Lys	Ile	Ile	Leu	Ile	Ser	Phe	Tyr	Phe	Tyr	Ile	Thr	Cys		
1			5					10					15				
Leu	Tyr	Ile	Cys	Ile	Asn	Asn	Val	Lys	Ser	Gly	Tyr	Ile	Pro	Leu	Arg		
		20					25					30					
Tyr	Ala	Thr	Thr	Asn	Val	Tyr	Leu	Tyr	Lys	Val	Ala	His	His	Ile	Lys		
		35				40					45						

<210> 5983
 <211> 211

<212> PRT

<213> S.epidermidis

<400> 5983

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Arg Ser Ile Leu Met His Lys Val Ile Leu Val Asp Asp His Tyr Ile
1           5           10           15
Val Arg Gln Gly Leu Glu Phe Leu Leu Ser Thr Val Asp Asp Leu Ser
          20           25           30
Val Leu Lys Gly Phe Lys Asp Gly Ala Thr Phe Leu Ser Tyr Leu Lys
          35           40           45
Asn Asn Glu Arg Pro Asp Ile Val Leu Leu Asp Leu Val Met Pro Glu
          50           55           60
Met Asn Gly Ile Glu Ile Thr Glu Ile Leu Lys Gln Gln Tyr Pro Glu
65           70           75           80
Ile Lys Val Leu Val Leu Thr Ser Tyr Val Asp Asp Glu His Val Ile
          85           90           95
Ser Ala Ile Asp Lys Gly Ala Asp Gly Tyr Glu Met Lys Asp Val Glu
          100          105          110
Pro Gln Lys Leu Ile Glu Thr Ile His Lys Val Leu Gln Gly Glu Arg
          115          120          125
Ile Ile His Pro Gln Ala Lys Ser Val Ile Lys Ala Val Ser Lys Lys
          130          135          140
Pro His Tyr Thr Asn Lys Leu Ser Lys Arg Glu Lys Glu Val Leu Lys
145          150          155          160
Glu Met Val Lys Gly Lys Thr Asn Lys Glu Ile Ala Arg Ala Leu Phe
          165          170          175
Val Ser Glu Lys Thr Val Lys Thr His Val Ser His Ile Phe Ser Lys
          180          185          190
Leu Glu Val Ser Asp Arg Thr Gln Ala Ala Ile Tyr Ala Met Glu Asn
          195          200          205
Lys Leu Ile
          210

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<210> 5984

<211> 65

<212> PRT

<213> S.epidermidis

<400> 5984

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Val Arg Ile Leu Pro Val Glu Pro Trp Leu Leu Gly Gln Ala Val Lys
1           5           10           15
Thr Pro Pro Phe His Gly Gly Asn Thr Gly Ser Ser Pro Val Gly Val
          20           25           30
Ile Gln Thr Glu Val Lys Tyr Arg Phe Cys Phe Phe Ile Ile Ile Phe
          35           40           45
Tyr His Gly Glu Leu Ser Glu Leu Ala Glu Gly Ala Arg Leu Glu Ser
          50           55           60
Val
65

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<210> 5985

<211> 336

<212> PRT

<213> S.epidermidis

<400> 5985


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Asn Val Tyr Lys Glu Glu Ile Met Thr Val Thr Ile Tyr Asp Val Ala
1          5          10          15
Arg Glu Ala Arg Val Ser Met Ala Thr Val Ser Arg Val Val Asn Gly
          20          25          30
Asn Gln Asn Val Lys Pro Glu Thr Arg Asn Lys Val Asn Glu Val Ile
          35          40          45
Lys Arg Leu Asn Tyr Arg Pro Asn Ala Val Ala Arg Gly Leu Ala Ser
          50          55          60
Lys Arg Thr Thr Thr Val Gly Val Ile Ile Pro Asp Ile Ser Asn Val
65          70          75          80
Tyr Tyr Ser Gln Leu Ala Arg Gly Leu Glu Asp Ile Ala Thr Met Tyr
          85          90          95
Lys Tyr His Ser Ile Ile Ser Asn Ser Asp Asn Asp Pro Glu Lys Glu
          100          105          110
Lys Glu Ile Phe Asn Asn Leu Leu Ser Lys Gln Val Asp Gly Ile Ile
          115          120          125
Phe Leu Gly Gly Thr Ile Ser Glu Glu Ile Lys Ser Leu Ile Asn Gln
          130          135          140
Ser Ser Val Pro Val Val Val Ser Gly Thr Asp Gly Lys Asp Asp His
145          150          155          160
Ile Ala Ser Val Asn Ile Asp Phe Lys Gln Ala Ala Glu Glu Ala Thr
          165          170          175
Gln Tyr Leu Ile Glu Lys Gly Ala Lys Thr Phe Ser Leu Ile Gly Gly
          180          185          190
Glu Tyr Ser Ile Lys Ala Gln Asp Asp Val Leu Glu Gly Leu Lys Asn
          195          200          205
Val Leu Ser Gln His Gln Leu Lys Leu Asp Asp Thr Leu His Leu Thr
          210          215          220
Gly Asn Glu Ser Tyr Lys Ser Gly Ile Lys Thr Phe Glu Gln Leu Gln
225          230          235          240
Ser Asn Leu Pro Asp Ala Val Leu Cys Ile Ser Asp Glu Gln Ala Ile
          245          250          255
Gly Ile Leu His Ser Ala Gln Asp Ala Gly Val Lys Val Pro Glu Asp
          260          265          270
Leu Gln Ile Ile Ser Phe Asn Asn Thr Arg Leu Val Glu Met Val Arg
          275          280          285
Pro Gln Leu Ser Ser Val Ile Gln Pro Leu Tyr Asp Ile Gly Ala Val
          290          295          300
Gly Met Arg Leu Leu Thr Lys Tyr Met Asn Asp Glu Glu Ile Glu Asn
305          310          315          320
Pro Asn Val Ile Leu Pro His Arg Ile Glu Tyr Arg Gly Thr Thr Gln
          325          330          335

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<210> 5986

<211> 476

<212> PRT

<213> S.epidermidis

<400> 5986

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Cys Gly Asn Lys Leu Ala Ser Thr Tyr Glu Gly Lys Gly Ala Ser Met
1          5          10          15
Lys Lys Asn Asn Lys Gln Asn Asp Gly Val Gln Arg Gly Leu Lys Asp
          20          25          30
Arg His Ile Ser Met Ile Ala Ile Gly Gly Cys Ile Gly Thr Gly Leu
          35          40          45
Phe Met Thr Ser Gly Gly Ala Ile His Asp Ala Gly Ala Leu Gly Ala

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<212> PRT

<213> S.epidermidis

<400> 5987

Phe Asn Asn Asn Asp Leu Arg Gly Val Asn Met Thr Lys His Lys Lys
 1 5 10 15
 Gly Ser Ile Leu Ala Ile Ile Gly Leu Leu Ile Val Phe Val Val Thr
 20 25 30
 Gly Phe Ile Phe Phe Ser Met Ile Ser Asp Gln Ile Phe Phe Lys His
 35 40 45
 Val Lys Pro Val Glu Lys Val Glu Lys Leu Asp Lys Thr Leu Asp Lys
 50 55 60
 Ala Ser Lys Lys Gln Ile His Asn Tyr Thr Ser Gln Gln Val Ser Asn
 65 70 75 80
 Lys Ala Asn Thr Ala Trp Arg Asp Ala Ser Gly Thr Glu Ile Lys Glu
 85 90 95
 Ala Met Asp Ser Ser Lys Phe Ile Asp Asp Asp Lys Gln Lys Tyr Gln
 100 105 110
 Phe Leu Asp Leu Ser Lys Tyr Gln Gly Ile Asp Lys Asn Arg Ile Lys
 115 120 125
 Arg Met Leu Phe Asp Arg Pro Val Leu Leu Lys His Thr Asp Asp Phe
 130 135 140
 Ile Asn Ala Ala Lys Ser Lys His Val Asn Glu Val Tyr Leu Ile Ser
 145 150 155 160
 His Ala Leu Leu Glu Thr Gly Ala Ala Lys Ser Glu Leu Ala Asn Gly
 165 170 175
 Val Glu Ile Asp Gly Lys Lys Tyr Tyr Asn Phe Tyr Gly Val Gly Ala
 180 185 190
 Leu Asp Ser Asp Pro Ile Lys Thr Gly Ala Glu Tyr Ala Lys Lys His
 195 200 205
 Gly Trp Asp Thr Pro Gln Lys Ala Ile Tyr Gly Gly Ala Asp Phe Ile
 210 215 220
 His Lys His Phe Leu Ser His Asp Asp Gln Asn Thr Leu Tyr Ser Met
 225 230 235 240
 Arg Trp Asn Pro Lys Asn Pro Gly Glu His Gln Tyr Ala Thr Asp Ile
 245 250 255
 Lys Trp Ala Glu Ser Asn Ala Asn Ile Ile Ala Asp Phe Tyr Lys Asn
 260 265 270
 Met Lys Thr Glu Gly Lys Tyr Phe Lys Leu Tyr Val Tyr Lys Asp Asp
 275 280 285
 Asp Lys His Gln Lys
 290

<210> 5988

<211> 983

<212> PRT

<213> S.epidermidis

<400> 5988

Glu Val Asn Lys Met Ile Ile Lys Ser Leu Glu Ile Tyr Gly Tyr Gly
 1 5 10 15
 Gln Phe Val Gln Arg Lys Ile Glu Phe Asn Arg Gln Phe Thr Glu Ile
 20 25 30
 Phe Gly Glu Asn Glu Ala Gly Lys Ser Thr Ile Gln Ala Phe Ile His
 35 40 45
 Ser Ile Leu Phe Gly Phe Pro Thr Lys Lys Ser Lys Glu Pro Arg Leu

50		55		60
Glu Pro Arg Leu Gly	Asn Gln Tyr Gly Gly Lys	Leu Ser Leu Ile Phe		
65	70	75	80	
Asp Asp Gly Ile Glu	Ala Glu Val Glu Arg Ile Lys Gly Ser Ala His			
	85	90	95	
Gly Asp Val Lys Ile Tyr Leu Lys Asp Gly Thr Ile Arg Asp Glu Val				
	100	105	110	
Trp Leu Asn Lys Lys Leu Asn Tyr Ile Ser Lys Lys Thr Tyr Gln Gly				
	115	120	125	
Ile Phe Ser Phe Asp Val Leu Gly Leu Gln Asp Ile His Lys Asn Leu				
	130	135	140	
Asp Glu Glu Gln Leu Gln Asp Tyr Leu Leu Glu Ala Gly Ala Leu Gly				
	145	150	155	160
Ser Thr Glu Phe Thr Ser Met Arg Asp Arg Ile Gly Gln Lys Lys Glu				
	165	170	175	
Glu Leu Tyr Lys Lys Ser Gly Lys Asn Pro Ile Ile Asn Gln Gln Ile				
	180	185	190	
Glu Gln Leu Lys Gln Leu Glu Asn Gln Ile Arg Asn Glu Glu Ser Lys				
	195	200	205	
Leu Asp Thr Tyr His Arg Leu Val Asp Asp Lys Asp Lys Ser Ser Arg				
	210	215	220	
Arg Leu Glu Asn Leu Lys Gln Asn Leu Asn Gln Leu Ser Lys Met His				
	225	230	235	240
Glu Gln Lys Gln Lys Glu Val Ala Leu His Asp Gln Thr Gln Glu Trp				
	245	250	255	
Lys Arg Leu Glu Gln Ser Leu Asn Ile Glu Pro Ile Asn Phe Pro Glu				
	260	265	270	
Lys Gly Ile Asp Arg Tyr Glu Thr Ala Lys Ser His Lys Gln Ser Leu				
	275	280	285	
Glu Arg Asp Lys Ser Leu Arg Glu Glu Arg Leu Ser Ile Leu Asn Lys				
	290	295	300	
Glu Ala Glu Ser Ile Asn Pro Val Asp Gln Lys Tyr Ile Asp Ser Phe				
	305	310	315	320
Asn Ser Leu Tyr Gln Gln Glu Thr Glu Ile Lys Gln Lys Glu Phe Glu				
	325	330	335	
Leu Arg Ser Ile Glu Lys Asp Ile Ala Asp Lys Gln Arg Glu Leu Glu				
	340	345	350	
Ala Leu Gln Ser Asn Ile Gly Trp Gln Glu Val Phe Tyr Asp Ala Asp				
	355	360	365	
Ser Thr Glu Ala Met Lys Ser His Met Ser Asp Leu Val Leu Gly Lys				
	370	375	380	
Gln Glu Gln Ile Ala Tyr Ile Asn Gln Leu Glu Arg Gly Leu Glu Glu				
	385	390	395	400
Asn Lys Ile Glu Arg Asn Ser Asn Ser Asn Glu Ile Asn Gln Val Glu				
	405	410	415	
Asn Glu Leu Val Pro Asp Glu Thr Phe Glu Lys Lys Lys Glu Tyr Thr				
	420	425	430	
Gln Gln Val Leu Glu Leu His Glu Lys Glu Asn Leu Tyr Glu Lys Leu				
	435	440	445	
Lys Glu Thr Phe Glu Glu Glu Gln Thr Gln Lys Asn Lys Arg Gln Lys				
	450	455	460	
Phe Leu Arg Ile Gly Phe Ile Val Leu Thr Ile Leu Ser Ala Ala Leu				
	465	470	475	480
Ser Ile Phe Ser Phe Phe Thr Ala Asn Leu Ile Phe Gly Ile Ile Phe				
	485	490	495	
Ala Leu Leu Thr Val Ile Phe Val Val Gly Ile Ile Phe Ser Arg Ser				

945 950 955 960
 Thr Lys Asp His Val Ile Pro Ala Lys Glu Val Leu Thr Leu Asn Lys
 965 970 975
 Leu Gln Glu Gly Gly Lys Lys
 980

<210> 5989
 <211> 260
 <212> PRT
 <213> S.epidermidis

<400> 5989
 Gly Lys Leu Asn Lys Phe Lys Arg Lys Val Thr Leu Met Lys Phe Arg
 1 5 10 15
 Arg Pro Asn Gln His Phe Gln Ile Val Ala His Arg Gly Leu Pro Glu
 20 25 30
 Asp Tyr Pro Glu Asn Thr Ile Ile Ala Tyr Arg His Ala Leu Met Leu
 35 40 45
 His Ile Asp Met Leu Glu Ile Asp Val His Tyr Thr Lys Asp Lys Glu
 50 55 60
 Leu Val Val Ile His Asp Asp Thr Ile Asp Arg Thr Ser Asn Gly Lys
 65 70 75 80
 Gly Lys Val Ser Asp Phe Thr Leu Lys Glu Leu Lys Ala Leu Asp Phe
 85 90 95
 Gly Phe Tyr Lys Gly Glu Lys Phe Lys Gly Glu Ser Ile Pro Thr Phe
 100 105 110
 Asp Glu Val Leu Asp Leu Ala Asp Asn Phe Ser Gln Lys Leu Leu Ile
 115 120 125
 Glu Ile Lys Lys Pro Ser Gln Tyr Pro Asn Ile Glu Asn Met Ile Val
 130 135 140
 Asp Lys Leu Lys Glu Arg Gln Ile Ser Lys Ser Lys Val Ile Leu Gln
 145 150 155 160
 Ser Phe Asp Phe Asp Cys Val Lys Lys Leu Ser Ala Met Asn Leu Asp
 165 170 175
 Tyr Glu Leu Gly Leu Leu Ile Ser Lys Lys Lys Tyr Trp His Lys Leu
 180 185 190
 Pro Asn Phe Lys Lys Ile Ala Lys Val Ala Asp Tyr Ala Asn Pro Asn
 195 200 205
 Tyr Gln Ile Val Ser Lys Lys Phe Met Gln Leu Ala His Glu Glu Glu
 210 215 220
 Leu Lys Val Leu Pro Tyr Thr Val Asn Lys Leu Lys Glu Ser Gln Lys
 225 230 235 240
 Leu Ile Asp Ile Gly Val Asp Gly Ile Ile Ser Asp Val Pro Glu Asp
 245 250 255
 Leu Phe Glu Leu
 260

<210> 5990
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 5990
 Lys Tyr Ser Leu Gln Ser Phe His Tyr Ile Asn Val His Phe Glu Gly
 1 5 10 15
 Ser Leu Ser Ile Asp Ile Ser Gly Phe Val Ile Tyr Lys Phe Ser His

Tyr Asn Tyr Asp Glu Phe Tyr Gln Gln Met Leu Ile Lys Met Trp Gln
 50 55 60
 Leu Thr Leu Asp Phe Asp Glu Gln Gln Ser Ser Ser Phe Lys Ser Tyr
 65 70 75 80
 Leu Phe Ile Arg Leu Lys Phe Tyr Leu Ile Asp Leu Phe Arg Gln Lys
 85 90 95
 Asp Asn Thr Leu Asn Ile Cys Ser Ile Asp Ala Leu Ser Glu Leu Ser
 100 105 110
 Pro Ser Phe Ser Ile Asn Glu Ile Asp Leu Leu Ile Lys Asp Ile Ser
 115 120 125
 Gln Gln Leu Leu Pro Arg Glu Arg Asp Trp Leu Thr Leu Tyr Leu Gln
 130 135 140
 Gly Tyr Lys Gln Tyr Glu Ile Ser Gln Ile Leu Asp Phe Ser Leu Thr
 145 150 155 160
 Thr Ile Lys Lys Ile Lys Ser Asn Ala Ile Arg Lys Leu Arg Arg Tyr
 165 170 175
 Leu Asn Ser Ser Thr Lys Asp
 180

<210> 5994

<211> 47

<212> PRT

<213> S.epidermidis

<400> 5994

Ile Gln Ser Lys Val Leu Pro Lys Thr Phe Lys Val Pro Val Cys Gln
 1 5 10 15
 Phe Tyr Lys Leu Lys Lys Thr Ala Ile Lys Trp Ile Tyr Phe Thr Arg
 20 25 30
 Leu Leu Phe Tyr Phe Ser Tyr Ile Arg Arg Phe Glu Arg Ile Val
 35 40 45

<210> 5995

<211> 150

<212> PRT

<213> S.epidermidis

<400> 5995

Glu Leu Thr Lys Glu Arg Cys Lys Met Gly Lys Ser Thr Asn Leu Phe
 1 5 10 15
 Lys Ile Ala Leu Gly Ile Gly Gly Ala Ile Thr Val Val Ala Leu Ser
 20 25 30
 Arg Lys Glu Ser Arg Asp Lys Leu Lys Gln Glu Tyr Asn Lys Tyr Lys
 35 40 45
 Glu Asn Pro Glu Ser Tyr Lys Ser Ser Ala Lys Asp Leu Ala Thr Gln
 50 55 60
 Ile Gly Asn Lys Ala Asn Glu Thr Ile Gln Glu Val Lys Lys Asn Pro
 65 70 75 80
 Lys Asp Tyr Val Glu Arg Ile Lys Ser Asn Pro Lys Glu Phe Leu Glu
 85 90 95
 Glu Glu Lys Ser Lys Ile Ile Gly Lys Asn Asp Gln Thr Gln Asp Asp
 100 105 110
 Ile Glu Glu Gly Lys Phe Asp Ala Glu Gly Gly Ala Thr Val Asn Asn
 115 120 125
 Asn Leu Arg Val Val Thr Glu Asp Asp Leu Lys Asn Asn Lys Asn Ala
 130 135 140

Leu Gln Asp Lys Lys Glu
145 150

<210> 5996
<211> 283
<212> PRT
<213> S.epidermidis

<400> 5996

Phe Met Thr Lys Val Phe Ile Asn Gly Glu Phe Val Asn Glu Glu Asp
1 5 10 15
Ala Lys Val Ser Tyr Glu Asp Arg Gly Tyr Val Phe Gly Asp Gly Ile
20 25 30
Tyr Glu Tyr Ile Arg Ala Tyr Asp Gly Lys Leu Phe Thr Val Lys Glu
35 40 45
His Phe Glu Arg Phe Leu Arg Ser Ala Glu Glu Ile Gly Leu Asp Leu
50 55 60
Asn Tyr Thr Ile Glu Glu Leu Ile Glu Leu Val Arg Arg Leu Leu Lys
65 70 75 80
Glu Asn Asn Val Val Asn Gly Gly Ile Tyr Ile Gln Ala Thr Arg Gly
85 90 95
Ala Ala Pro Arg Asn His Ser Phe Pro Thr Pro Pro Val Lys Pro Val
100 105 110
Ile Met Ala Phe Thr Lys Ser Tyr Asp Arg Pro Tyr Glu Glu Leu Glu
115 120 125
Gln Gly Val Tyr Ala Ile Thr Thr Glu Asp Ile Arg Trp Leu Arg Cys
130 135 140
Asp Ile Lys Ser Leu Asn Leu Leu Gly Asn Val Leu Ala Lys Glu Tyr
145 150 155 160
Ala Val Lys Tyr Asn Ala Ala Glu Ala Ile Gln His Arg Gly Asp Ile
165 170 175
Val Thr Glu Gly Ala Ser Ser Asn Val Tyr Ala Ile Lys Asp Gly Val
180 185 190
Ile Tyr Thr His Pro Val Asn Asn Phe Ile Leu Asn Gly Ile Thr Arg
195 200 205
Arg Val Ile Lys Trp Ile Ala Glu Asp Glu Gln Ile Pro Phe Lys Glu
210 215 220
Glu Thr Phe Thr Val Glu Phe Leu Lys Ser Ala Asp Glu Val Ile Ile
225 230 235 240
Ser Ser Thr Ser Ala Glu Val Met Pro Ile Thr Lys Ile Asp Gly Glu
245 250 255
Asn Val Gln Asp Gly Gln Val Gly Thr Ile Thr Arg Gln Leu Gln Gln
260 265 270
Gly Phe Glu Lys Tyr Ile Gln Ser His Ser Ile
275 280

<210> 5997
<211> 245
<212> PRT
<213> S.epidermidis

<400> 5997

Met Tyr Lys Lys Ile Arg Arg His Thr Met Ser Gln Lys Ile Leu Val
1 5 10 15
Val Asp Asp Glu Gln Ser Ile Val Thr Leu Leu Lys Tyr Asn Leu Glu
20 25 30

Thr Ala Gly Tyr Ile Val Glu Val Ala Tyr Asp Gly Glu Glu Ala Leu
 35 40 45
 Lys Lys Val Glu Thr Glu Gln Pro Glu Leu Ile Val Leu Asp Val Met
 50 55 60
 Leu Pro Lys Lys Asp Gly Ile Glu Val Cys Lys Thr Ile Arg Ser Asp
 65 70 75 80
 Lys Asn Leu Val Pro Ile Leu Met Leu Thr Ala Lys Asp Asp Glu Phe
 85 90 95
 Asp Arg Val Leu Gly Leu Glu Leu Gly Ala Asp Asp Tyr Met Thr Lys
 100 105 110
 Pro Phe Ser Pro Arg Glu Val Val Ala Arg Val Lys Ala Ile Leu Arg
 115 120 125
 Arg Ser Gln Phe Val Asn Glu Ile Glu Lys Glu Asp Val Asp Asp Glu
 130 135 140
 Asp Ile Ile Ile Gly Ser Ile Arg Ile Arg Pro Glu Phe Phe Glu Val
 145 150 155 160
 Tyr Lys Glu Asp Glu Leu Leu Glu Leu Thr Pro Lys Glu Phe Glu Leu
 165 170 175
 Leu Leu Tyr Leu Ile Glu Arg Gln Gly Arg Val Ile Thr Arg Glu His
 180 185 190
 Met Leu Asn Ser Val Trp Asn Tyr Glu Phe Ala Gly Asp Ser Arg Ile
 195 200 205
 Val Asp Val His Ile Ser His Leu Arg Asp Lys Leu Glu Glu Asn Pro
 210 215 220
 Lys Gln Pro Lys Leu Ile Lys Thr Val Arg Gly Leu Gly Tyr Lys Leu
 225 230 235 240
 Glu Arg Pro Lys Ala
 245

<210> 5998

<211> 264

<212> PRT

<213> S.epidermidis

<400> 5998

Cys Asn Lys Asn Lys Gly Val Arg Leu Asn Met Asp Trp Asn Leu Ser
 1 5 10 15
 Ile Met Leu Met Ile Val Ala Phe Gly Phe Ile Ala Ser Phe Val Asp
 20 25 30
 Ser Val Val Gly Gly Gly Gly Leu Ile Ser Thr Pro Ala Leu Leu Ala
 35 40 45
 Val Gly Leu Pro Pro Ser Val Ala Leu Gly Thr Asn Lys Phe Ala Ser
 50 55 60
 Ser Phe Ser Thr Leu Thr Ser Ala Leu Lys Phe Leu Arg Ser Gly Lys
 65 70 75 80
 Val Asp Leu Lys Ile Val Gly Lys Met Phe Pro Leu Ile Phe Val Ala
 85 90 95
 Ser Gly Gly Gly Ala Ile Ile Ala Thr Tyr Ile Pro Ala Asn Ile Leu
 100 105 110
 Lys Pro Leu Ile Ile Ile Ala Leu Ser Leu Val Leu Ile Tyr Thr Val
 115 120 125
 Ile Gln Lys Asp Trp Gly Asn Ile Arg Thr Phe Thr Asp Phe Thr Phe
 130 135 140
 Thr Lys Ala Val Leu Phe Thr Leu Ile Phe Ile Val Ile Gly Phe Tyr
 145 150 155 160
 Asp Gly Phe Leu Gly Gly Gly Thr Gly Ser Phe Met Leu Phe Thr Leu

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                165                170                175
Leu Leu Phe Gly Phe Asp Phe Leu Ser Ala Ala Gly Asn Ala Lys Val
                180                185                190
Leu Asn Phe Ala Ser Asn Cys Gly Ala Leu Leu Phe Phe Met Ile Leu
                195                200                205
Gly Gln Val Asn Tyr Phe Tyr Gly Ile Ile Met Ala Ser Ser Met Met
                210                215                220
Ile Gly Val Leu Leu Gly Ala Gln Phe Ala Leu Lys Lys Gly Val Gly
225                230                235                240
Tyr Val Lys Ala Leu Phe Leu Val Val Thr Ala Ile Leu Ile Ile Lys
                245                250                255
Asn Leu Tyr Asp Phe Ile Val Gln
                260

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<210> 5999
<211> 40
<212> PRT
<213> S.epidermidis

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<400> 5999
Val Val Lys Asn Asn Ile Ser Ala Gly Trp Ser Ser Ser Val Ala Arg
1                5                10                15
Arg Ala His Asn Pro Lys Val Gly Gly Ser Asn Pro Pro Pro Ala Ile
                20                25                30
His Val Leu Leu Gly Leu Val Val
                35                40

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<210> 6000
<211> 415
<212> PRT
<213> S.epidermidis

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<400> 6000
Ile Glu Lys Asn Ile Lys Arg Gly Thr His Asp Met Asn Ile Pro Lys
1                5                10                15
Ser Val Trp Trp Leu Val Ile Gly Met Ala Leu Asn Ile Thr Gly Ala
                20                25                30
Ser Phe Leu Trp Pro Leu Asn Thr Ile Phe Met Lys Glu Glu Leu His
                35                40                45
Lys Ser Leu Thr Ile Ala Gly Ile Val Leu Met Ile Asn Ser Phe Gly
                50                55                60
Met Val Val Gly Asn Leu Leu Gly Gly Ser Leu Phe Asp Lys Leu Gly
65                70                75                80
Gly Tyr Lys Thr Ile Leu Ile Gly Thr Phe Thr Cys Val Cys Ser Thr
                85                90                95
Thr Leu Leu Asn Leu Phe His Gly Trp Pro Trp Tyr Ala Ile Trp Leu
                100                105                110
Val Leu Leu Gly Phe Gly Gly Gly Met Ile Val Pro Ala Ile Tyr Ala
                115                120                125
Met Ala Gly Ala Val Trp Pro Asn Gly Gly Arg Gln Thr Phe Asn Ala
                130                135                140
Ile Tyr Leu Ala Gln Asn Ile Gly Val Ala Leu Gly Ala Ala Leu Gly
145                150                155                160
Gly Phe Val Ala Glu Phe Ser Phe Asn Tyr Ile Phe Met Ala Asn Leu
                165                170                175
Ile Met Tyr Val Leu Phe Ala Ile Val Ala Ile Thr Gln Phe Asn Leu

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50

<210> 6003
 <211> 134
 <212> PRT
 <213> S.epidermidis

<400> 6003
 Met Leu Arg Lys Tyr Trp Ile His Phe Val Ile Val Thr Val Ile Val
 1 5 10 15
 Ser Leu Ile Ser Ile Lys Gly Phe Pro Leu Ala Leu Gly Ala Leu Tyr
 20 25 30
 Leu Pro Leu Leu Phe Lys Ile Val Gln Leu Gln Leu Asn Leu Ser Lys
 35 40 45
 Gly Leu Ile Asp Asn Val Asn Val His Thr Phe Ile Lys Ser Asn Gln
 50 55 60
 Ser Gly Val Val Ile Ser Val Ile Cys Cys Leu Leu Ile Thr Gly Val
 65 70 75 80
 Leu Thr Tyr Thr Leu Asp Asp Phe Tyr Asn Glu Leu Pro Gly Phe Leu
 85 90 95
 Gly Val Leu Val Ser Ile Ser Pro Val Thr Leu Thr Ile Gly Val Ile
 100 105 110
 Leu Phe Val Leu Thr Ala Ile Ala Ile Val Gln Ala Thr Lys Ala Lys
 115 120 125
 Tyr Gln Gln Ser Lys Asn
 130

<210> 6004
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 6004
 Ser Lys Arg Lys Asn Val Tyr Thr Asn His Leu Ile Val Arg Arg Ser
 1 5 10 15
 Ser Thr Val Met Ile Ser Ile Ser Leu Tyr Phe Phe Lys Leu His Glu
 20 25 30
 Ile Ser Leu Ser Ser Phe Cys Asn
 35 40

<210> 6005
 <211> 650
 <212> PRT
 <213> S.epidermidis

<400> 6005
 Ile Gly Gly Lys Asn Met Asn Gln Ile Asn Ile Gln Phe Pro Asp Gly
 1 5 10 15
 Asn Thr Lys Glu Phe Asp Lys Gly Thr Thr Thr Glu Asp Ile Ala Gln
 20 25 30
 Ser Ile Ser Pro Gly Leu Arg Lys Lys Ala Val Ala Gly Lys Phe Asn
 35 40 45
 Gly Gln Leu Val Asp Leu Thr Arg Pro Leu Glu Gln Asp Gly Ala Ile
 50 55 60
 Glu Ile Ile Thr Pro Gly Ser Glu Glu Ala Leu Glu Val Leu Arg His
 65 70 75 80

Ser	Thr	Ala	His	Leu	Met	Ala	Gln	Ala	Leu	Lys	Arg	Leu	Tyr	Gly	Asp	
			85						90					95		
Val	Lys	Phe	Gly	Val	Gly	Pro	Val	Ile	Glu	Gly	Gly	Phe	Tyr	Tyr	Asp	
		100						105					110			
Phe	Asp	Met	Asp	Asp	Lys	Val	Ser	Ser	Asp	Asp	Phe	Asp	Lys	Ile	Glu	
	115						120					125				
Lys	Thr	Met	Lys	Gln	Ile	Val	Asn	Glu	Asn	His	Lys	Ile	Val	Arg	Glu	
	130					135					140					
Val	Val	Ser	Lys	Glu	Lys	Ala	Lys	Asp	Phe	Phe	Lys	Asp	Asp	Pro	Tyr	
145					150					155					160	
Lys	Leu	Glu	Leu	Ile	Asp	Ala	Ile	Pro	Glu	Asp	Glu	Ser	Val	Thr	Leu	
			165						170						175	
Tyr	Thr	Gln	Gly	Glu	Phe	Thr	Asp	Leu	Cys	Arg	Gly	Val	His	Val	Pro	
		180						185					190			
Ser	Thr	Ser	Lys	Ile	Lys	Glu	Phe	Lys	Leu	Leu	Ser	Thr	Ala	Gly	Ala	
		195					200						205			
Tyr	Trp	Arg	Gly	Asn	Ser	Asp	Asn	Lys	Met	Leu	Gln	Arg	Ile	Tyr	Gly	
	210					215					220					
Thr	Ala	Phe	Phe	Asp	Lys	Lys	Asp	Leu	Lys	Ala	His	Leu	Lys	Met	Leu	
225					230					235					240	
Glu	Glu	Arg	Arg	Glu	Arg	Asp	His	Arg	Lys	Ile	Gly	Lys	Asp	Leu	Glu	
				245					250					255		
Leu	Phe	Thr	Asn	Asn	Gln	Leu	Val	Gly	Ala	Gly	Leu	Pro	Leu	Trp	Leu	
			260					265					270			
Pro	Asn	Gly	Ala	Thr	Ile	Arg	Arg	Glu	Ile	Glu	Arg	Tyr	Ile	Val	Asp	
		275					280					285				
Lys	Glu	Val	Ser	Met	Gly	Tyr	Asp	His	Val	Tyr	Thr	Pro	Val	Leu	Ala	
	290					295					300					
Asn	Val	Asp	Leu	Tyr	Lys	Thr	Ser	Gly	His	Trp	Asp	His	Tyr	Gln	Glu	
305					310					315					320	
Asp	Met	Phe	Pro	Ala	Met	Lys	Leu	Asp	Glu	Asp	Glu	Ala	Met	Val	Leu	
				325					330					335		
Arg	Pro	Met	Asn	Cys	Pro	His	His	Met	Met	Ile	Tyr	Lys	Asn	Lys	Pro	
			340					345					350			
His	Ser	Tyr	Arg	Glu	Leu	Pro	Ile	Arg	Ile	Ala	Glu	Leu	Gly	Thr	Met	
		355					360					365				
His	Arg	Tyr	Glu	Ala	Ser	Gly	Ala	Val	Ser	Gly	Leu	Gln	Arg	Val	Arg	
	370					375					380					
Gly	Met	Thr	Leu	Asn	Asp	Ser	His	Ile	Phe	Val	Arg	Pro	Asp	Gln	Ile	
385					390					395					400	
Lys	Glu	Glu	Phe	Lys	Arg	Val	Val	Asn	Met	Ile	Gln	Asp	Val	Tyr	Lys	
				405					410					415		
Asp	Phe	Gly	Phe	Glu	Asp	Tyr	Arg	Phe	Arg	Leu	Ser	Tyr	Arg	Asp	Pro	
			420					425					430			
Glu	Asp	Lys	His	Lys	Tyr	Phe	Asp	Asp	Asp	Glu	Met	Trp	Glu	Lys	Ala	
	435						440					445				
Glu	Ser	Met	Leu	Lys	Glu	Ala	Ser	Asp	Glu	Leu	Gly	Leu	Thr	Tyr	Glu	
	450					455					460					
Glu	Ala	Ile	Gly	Glu	Ala	Phe	Tyr	Gly	Pro	Lys	Leu	Asp	Val	Gln		
465					470				475					480		
Val	Lys	Thr	Ala	Met	Gly	Lys	Glu	Glu	Thr	Leu	Ser	Thr	Ala	Gln	Leu	
				485					490					495		
Asp	Phe	Leu	Leu	Pro	Glu	Arg	Phe	Asp	Leu	Thr	Tyr	Ile	Gly	Gln	Asp	
			500					505					510			
Gly	Glu	Gln	His	Arg	Pro	Val	Val	Ile	His	Arg	Gly	Val	Val	Ser	Thr	
		515					520					525				

Met Glu Arg Phe Val Ala Phe Leu Thr Glu Glu Thr Lys Gly Ala Phe
 530 535 540
 Pro Thr Trp Leu Ala Pro Met Gln Val Glu Ile Ile Pro Val Asn Ile
 545 550 555 560
 Asp Leu His Tyr Asp Tyr Ala Arg Leu Leu Gln Asp Glu Leu Lys Ser
 565 570 575
 Gln Gly Val Arg Val Glu Ile Asp Asp Arg Asn Glu Lys Met Gly Tyr
 580 585 590
 Lys Ile Arg Glu Ala Gln Met Lys Lys Ile Pro Tyr Gln Ile Val Val
 595 600 605
 Gly Asp Gln Glu Val Glu Asn Gln Glu Val Asn Val Arg Lys Tyr Gly
 610 615 620
 Ser Glu Lys Gln Glu Ser Val Glu Lys Asp Glu Phe Ile Trp Asn Val
 625 630 635 640
 Ile Asp Glu Ile Arg Leu Lys Lys His Arg
 645 650

<210> 6006
 <211> 156
 <212> PRT
 <213> S.epidermidis

<400> 6006
 Leu Ile Leu Lys Arg Gly Thr Tyr Gln Met Ser Lys Asn Glu Phe Ile
 1 5 10 15
 Lys Arg Val Asn Lys Gln Leu Trp Phe Leu Asn Ala Lys Glu Glu Asp
 20 25 30
 Ala Leu Asn Lys Tyr Ile Asp Ser Val Asp Gln Asn Lys Ser Ile Asp
 35 40 45
 Thr His Lys Pro Ile Arg Phe Ser Asn Glu Tyr Leu Lys Lys Phe Ile
 50 55 60
 Phe Asn His Lys Lys Lys Ser Thr Ser His Val Phe Val Leu Leu Ile
 65 70 75 80
 Cys Met Val Leu Ala Tyr Ala Phe Leu Leu Gly Leu Phe Ile Leu Gly
 85 90 95
 Leu Val Ala Ser Leu Ala Ile Val His Ala Tyr Ile Asn Pro Asn Ile
 100 105 110
 Asp Leu Ser Val Phe Val Ile Leu Thr Val Leu Ile Val Ala Ile Ile
 115 120 125
 Ile Met Ile Ala Ser Leu Tyr Ala Ile Lys His Thr Thr Ala Leu Phe
 130 135 140
 Thr Lys Lys Leu Leu Glu Tyr Lys Phe Asn Lys Arg
 145 150 155

<210> 6007
 <211> 905
 <212> PRT
 <213> S.epidermidis

<400> 6007
 Cys Val Val Asn Thr Lys Leu Ala Tyr Ser Leu Cys Ile Cys Ile Tyr
 1 5 10 15
 Ala Lys Ile Tyr Val Asn Leu Phe Trp Arg Leu Arg Ile Leu Asn Lys
 20 25 30
 Leu Val Leu Ile Asp Gly Asn Ser Leu Ser Phe Arg Ala Phe Tyr Ala
 35 40 45

Leu	Pro	Leu	Leu	Ser	Asn	His	Ala	Gly	Ile	His	Thr	Asn	Ala	Val	Tyr
50						55					60				
Gly	Phe	Ala	Met	Leu	Leu	Glu	Lys	Ile	Ile	Lys	Glu	Glu	Lys	Pro	Asn
65					70					75					80
His	Phe	Leu	Val	Ala	Phe	Asp	Ala	Gly	Lys	Thr	Thr	Phe	Arg	His	Ser
				85					90					95	
Lys	Tyr	Ser	Glu	Tyr	Lys	Gly	Gly	Arg	Gln	Lys	Thr	Pro	Pro	Glu	Leu
			100					105					110		
Ser	Glu	Gln	Phe	Pro	Tyr	Ile	Arg	Gln	Leu	Leu	Asp	Ala	Tyr	His	Ile
		115					120					125			
Lys	Arg	Tyr	Glu	Leu	Asp	Asn	Tyr	Glu	Ala	Asp	Asp	Ile	Ile	Gly	Lys
	130					135					140				
Leu	Ser	Arg	Gln	Ala	Asp	Glu	Glu	Asp	Phe	Glu	Thr	Ile	Ile	Ile	Thr
145					150					155					160
Gly	Asp	Arg	Asp	Leu	Thr	Gln	Leu	Ala	Thr	Asp	Asn	Val	Thr	Ile	Tyr
				165					170					175	
Tyr	Thr	Lys	Lys	Gly	Val	Thr	Asp	Val	Asp	His	Tyr	Thr	Pro	Lys	Phe
			180					185					190		
Ile	Ala	Glu	Lys	Tyr	Asn	Gly	Leu	Val	Pro	Lys	Gln	Ile	Ile	Asp	Met
		195					200					205			
Lys	Gly	Leu	Met	Gly	Asp	Thr	Ser	Asp	Asn	Ile	Pro	Gly	Val	Ala	Gly
	210					215					220				
Val	Gly	Glu	Lys	Thr	Ala	Ile	Lys	Leu	Leu	Asn	Gln	Phe	Glu	Ser	Val
225					230					235					240
Glu	Gly	Val	Tyr	Glu	His	Ile	Glu	Glu	Val	Thr	Ala	Lys	Lys	Leu	Lys
				245					250					255	
Glu	Lys	Leu	Ile	Asn	Ser	Lys	Asp	Asp	Ala	Leu	Met	Ser	Lys	Asp	Leu
		260						265					270		
Ala	Thr	Ile	Asn	Val	His	Ser	Pro	Ile	Glu	Val	Ser	Leu	Glu	Asp	Thr
		275					280					285			
Lys	Leu	Thr	Leu	Gln	Asp	Asp	Thr	Thr	Glu	Lys	Ile	Glu	Leu	Phe	Lys
	290					295					300				
Lys	Leu	Glu	Phe	Lys	Gln	Leu	Leu	Ala	Asp	Ile	Asp	Thr	Ser	Ser	Thr
305					310					315					320
Asn	Glu	Glu	Val	Ile	Asp	Lys	Thr	Phe	Glu	Ile	Glu	Gln	Asp	Phe	Gln
				325					330					335	
Asn	Val	Asp	Leu	Asn	Asp	Leu	Asn	Glu	Ala	Val	Ile	His	Phe	Glu	Leu
			340					345					350		
Glu	Gly	Thr	Asn	Tyr	Leu	Lys	Asp	Thr	Ile	Leu	Lys	Phe	Gly	Phe	Tyr
		355					360					365			
Thr	Asn	His	Gln	His	Val	Val	Ile	Asn	Ala	Glu	Asp	Val	Lys	Asp	Tyr
	370					375					380				
Lys	His	Leu	Val	Gln	Trp	Leu	Glu	Asp	Lys	Asn	Thr	Thr	Lys	Ile	Val
385					390					395					400
Tyr	Asp	Ala	Lys	Lys	Thr	Tyr	Val	Ser	Ala	His	Arg	Leu	Gly	Ile	Asn
			405						410					415	
Ile	Glu	Asn	Ile	Glu	Phe	Asp	Val	Met	Leu	Ala	Ser	Tyr	Ile	Ile	Asp
			420					425					430		
Pro	Ser	Arg	Ser	Ile	Asp	Asp	Val	Lys	Ser	Val	Val	Ser	Leu	Tyr	Gly
		435					440					445			
Gln	Asn	Tyr	Val	Lys	Asp	Asn	Ile	Thr	Ile	Phe	Gly	Lys	Gly	Lys	Lys
	450					455					460				
His	His	Ile	Pro	Glu	Glu	Pro	Ile	Leu	Asn	Glu	His	Ile	Ala	Ser	Val
465					470					475					480
Thr	Glu	Ala	Ile	Ala	Ala	Val	Thr	Pro	Thr	Met	Lys	Ser	Gln	Leu	Glu
				485					490					495	


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Asp Tyr Asn Gln Ile Glu Leu Leu Lys Asp Leu Glu Leu Pro Leu Ala
      500                      505          510
Arg Ile Leu Ser Glu Met Glu Glu Ile Gly Ile Tyr Thr Asp Ile Asn
      515                      520          525
Asp Leu Lys Glu Met Glu Phe Glu Ile Gln Lys Lys Leu Asp Val Leu
      530                      535          540
Ile Ser Asn Ile His Glu Ser Ala Gly Glu Ala Phe Asn Ile Asn Ser
      545                      550          555          560
Pro Lys Gln Leu Gly Val Val Leu Phe Glu Thr Leu Gln Leu Pro Val
      565                      570          575
Ile Lys Lys Thr Lys Thr Gly Tyr Ser Thr Ala Val Asp Val Leu Glu
      580                      585          590
Lys Leu Gln Gly Glu His Pro Ile Asp Asp Ile Leu Glu Tyr Arg
      595                      600          605
Gln Leu Ala Lys Leu Gln Ser Thr Tyr Val Glu Gly Leu Gln Lys Val
      610                      615          620
Ile Ser Lys Asp His Arg Ile His Thr Arg Phe Asn Gln Thr Leu Ala
      625                      630          635          640
Gln Thr Gly Arg Leu Ser Ser Ile Asp Pro Asn Leu Gln Asn Ile Pro
      645                      650          655
Ile Arg Leu Glu Glu Gly Arg Lys Ile Arg Lys Ala Phe Lys Pro Thr
      660                      665          670
Ser Lys Asp Ser Val Ile Leu Ser Ala Asp Tyr Ser Gln Ile Glu Leu
      675                      680          685
Arg Val Leu Ala His Ile Thr Gln Asp Glu Ser Leu Lys His Ala Phe
      690                      695          700
Ile Asn Gly His Asp Ile His Thr Ala Thr Ala Met Lys Val Phe Asn
      705                      710          715          720
Val Glu Ser Asp Gln Val Asp Ser Leu Met Arg Arg Gln Ala Lys Ala
      725                      730          735
Val Asn Phe Gly Ile Val Tyr Gly Ile Ser Asp Tyr Gly Leu Ser Gln
      740                      745          750
Ser Leu Gly Ile Thr Arg Lys Gln Ala Lys Ala Phe Ile Asp Asp Tyr
      755                      760          765
Leu Ala Ser Phe Pro Gly Val Lys Gln Tyr Met Ser Asp Ile Val Lys
      770                      775          780
Asp Ala Lys Ala Gln Gly Tyr Val Glu Thr Leu Leu His Arg Arg Arg
      785                      790          795          800
Tyr Ile Pro Asp Ile Thr Ser Arg Asn Val Asn Leu Arg Ser Phe Ala
      805                      810          815
Glu Arg Thr Ala Met Asn Thr Pro Ile Gln Gly Ser Ala Ala Asp Ile
      820                      825          830
Ile Lys Leu Ala Met Val Lys Phe Ser Glu Lys Ile Lys Glu Thr Lys
      835                      840          845
Tyr His Ala Lys Leu Leu Leu Gln Val His Asp Glu Leu Ile Phe Glu
      850                      855          860
Ile Pro Lys Ser Glu Val Glu Asp Phe Ser Lys Phe Val Glu Glu Ile
      865                      870          875          880
Met Glu Gln Ala Leu Val Leu Asp Val Pro Leu Lys Val Asp Ser Asn
      885                      890          895
Tyr Gly Ala Thr Trp Tyr Asp Ala Lys
      900                      905

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<210> 6008

<211> 157

<212> PRT

<213> S.epidermidis

<400> 6008

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Glu Asp Ser Lys Met Asn Phe Glu Gly Lys Leu Val Gly Lys Asp Leu
1      5      10      15
Lys Ile Ala Ile Val Val Ser Arg Phe Asn Asp Phe Ile Thr Thr Arg
      20      25      30
Leu Leu Glu Gly Ala Lys Asp Thr Leu Ile Arg His Glu Val Glu Asp
      35      40      45
Thr Asn Ile Asp Val Ala Tyr Val Pro Gly Ala Phe Glu Ile Pro Leu
      50      55      60
Val Ala Lys Lys Leu Ala Gln Lys Gly Glu Tyr Asp Ala Val Ile Thr
65      70      75      80
Leu Gly Cys Val Ile Arg Gly Ala Thr Ser His Tyr Asp Tyr Val Cys
      85      90      95
Asn Glu Val Ala Lys Gly Val Ser Lys Ala Asn Asp Ile Ser Asp Thr
      100     105     110
Pro Val Ile Phe Gly Val Leu Thr Thr Glu Ser Ile Glu Gln Ala Val
      115     120     125
Glu Arg Ala Gly Thr Lys Ala Gly Asn Lys Gly Ser Glu Ala Ala Val
      130     135     140
Ser Ala Ile Glu Met Ala Asn Leu Ile Lys Gln Ile Asn
145      150      155

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<210> 6009

<211> 165

<212> PRT

<213> S.epidermidis

<400> 6009

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Arg Asn Thr Lys Thr Thr Ser Leu Phe Lys Phe Ile Tyr Lys Gly Leu
1      5      10      15
Thr Ser Met Lys Cys Ile Ser Thr His Ser Leu Leu Tyr Ile Gln Thr
      20      25      30
Ala Phe Ser Thr Asn Val Glu Thr Tyr Ile Gln Tyr Glu His Tyr Ala
      35      40      45
Ile His Leu Pro Cys Thr Pro Glu Lys Thr Leu His Tyr Leu Leu Glu
      50      55      60
Leu His Gln Lys Ser Tyr His Asn Gln Cys Met Leu Ser Lys Asn Ile
65      70      75      80
Leu Asn Ile Lys Lys Phe Ile Pro Ile Tyr Ile Asn Glu Glu Thr Ile
      85      90      95
Leu Phe Pro Val Thr Gln Lys Arg Ala Pro Ile Lys Tyr Phe Ile Asn
      100     105     110
Ala Arg Asn Ile Ile Gly Ile His Ser Ser Ile His Thr Thr Met Ile
      115     120     125
Val Phe Glu Asp Gly Thr Thr Ile Glu Leu Asn Ile Pro Tyr Thr Leu
      130     135     140
Val Thr Lys Lys Trp Gln Arg Asn Leu Thr Val Gly His Ile Ile Lys
145      150      155      160
Lys Thr Thr Phe Tyr
      165

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<210> 6010

<211> 341

<212> PRT

<213> S.epidermidis

<400> 6010

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Met Ala Thr Asn Ile Ala Ile Asn Gly Met Gly Arg Ile Gly Arg Met
1          5          10          15
Val Leu Arg Ile Ala Leu Asn Asn Lys Asn Leu Asn Val Lys Ala Ile
          20          25          30
Asn Ala Ser Tyr Pro Pro Glu Thr Ile Ala His Leu Leu Asn Tyr Asp
          35          40          45
Thr Thr His Gly Val Tyr Asp Lys Lys Val Glu Pro Ile Glu Ser Gly
          50          55          60
Ile Lys Val Asn Gly His Glu Ile Lys Leu Leu Ser Asp Arg Asn Pro
65          70          75          80
Glu Asn Leu Pro Trp Asn Glu Met Asp Ile Asp Val Val Ile Glu Ala
          85          90          95
Thr Gly Lys Phe Asn His Gly Asp Lys Ala Val Ala His Ile Asn Ala
          100          105          110
Gly Ala Lys Lys Val Leu Leu Thr Gly Pro Ser Lys Gly Gly Asp Val
          115          120          125
Gln Met Ile Val Lys Gly Val Asn Asp Asn Gln Leu Asp Ile Asp Thr
          130          135          140
Tyr Asp Ile Phe Ser Asn Ala Ser Cys Thr Thr Asn Cys Ile Gly Pro
145          150          155          160
Val Ala Lys Val Leu Asn Asp Lys Phe Gly Ile Ile Asn Gly Leu Met
          165          170          175
Thr Thr Val His Ala Ile Thr Asn Asp Gln Lys Asn Ile Asp Asn Pro
          180          185          190
His Lys Asp Leu Arg Arg Ala Arg Ser Cys Asn Glu Ser Ile Ile Pro
          195          200          205
Thr Ser Thr Gly Ala Ala Lys Ala Leu Lys Glu Val Leu Pro Glu Val
          210          215          220
Glu Gly Lys Leu His Gly Met Ala Leu Arg Val Pro Thr Lys Asn Val
225          230          235          240
Ser Leu Val Asp Leu Val Val Asp Leu Glu Gln Asn Val Thr Val Thr
          245          250          255
Gln Val Asn Asp Ala Phe Lys Asn Ala Asp Leu Ser Gly Val Leu Asp
          260          265          270
Val Glu Glu Ala Pro Leu Val Ser Val Asp Phe Asn Thr Asn Pro His
          275          280          285
Ser Ala Ile Ile Asp Ser Gln Ser Thr Met Val Met Gly Gln Asn Lys
          290          295          300
Val Lys Val Ile Ala Trp Tyr Asp Asn Glu Trp Gly Tyr Ser Asn Arg
305          310          315          320
Val Val Glu Val Ala Asp Lys Ile Gly Gln Leu Ile Asp Asp Lys Ala
          325          330          335
Met Val Lys Ala Ile
          340

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<210> 6011

<211> 835

<212> PRT

<213> S.epidermidis

<400> 6011

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Leu Leu Ala Asn Lys Gly Gly Asn Ala Ala Gln Val Val Pro Phe Lys
1          5          10          15

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Ser	Leu	Ile	Val	Glu	Met	Ser	Phe	Tyr	Glu	Leu	Gly	Gly	Asn	Val	Leu
			20					25					30		
Asn	Tyr	Asn	His	Lys	Glu	Ile	Glu	Lys	Lys	Trp	Gln	Asn	Tyr	Trp	Glu
		35					40					45			
Glu	Asn	Lys	Thr	Phe	Lys	Thr	Asn	Asp	Asn	Leu	Gly	Gln	Lys	Lys	Phe
	50					55				60					
Tyr	Ala	Leu	Asp	Met	Phe	Pro	Tyr	Pro	Ser	Gly	Ala	Gly	Leu	His	Val
65					70				75					80	
Gly	His	Pro	Glu	Gly	Tyr	Thr	Ala	Thr	Asp	Ile	Ile	Ser	Arg	Tyr	Lys
			85						90					95	
Arg	Met	Gln	Gly	Tyr	Asn	Val	Leu	His	Pro	Met	Gly	Trp	Asp	Ala	Phe
			100					105					110		
Gly	Leu	Pro	Ala	Glu	Gln	Tyr	Ala	Leu	Asp	Thr	Gly	Asn	Asp	Pro	Arg
		115					120					125			
Glu	Phe	Thr	Gln	Lys	Asn	Ile	Gln	Thr	Phe	Lys	Arg	Gln	Ile	Gln	Glu
	130					135					140				
Leu	Gly	Phe	Ser	Tyr	Asp	Trp	Asp	Arg	Glu	Val	Asn	Thr	Thr	Asp	Pro
145					150					155					160
Glu	Tyr	Tyr	Lys	Trp	Thr	Gln	Trp	Ile	Phe	Ile	Gln	Leu	Tyr	Asn	Lys
			165						170					175	
Gly	Leu	Ala	Tyr	Val	Asp	Glu	Val	Ala	Val	Asn	Trp	Cys	Pro	Ala	Leu
			180					185					190		
Gly	Thr	Val	Leu	Ser	Asn	Glu	Glu	Val	Val	Asp	Gly	Val	Ser	Glu	Arg
	195						200					205			
Gly	Gly	His	Pro	Val	Tyr	Arg	Lys	Pro	Met	Lys	Gln	Trp	Val	Leu	Lys
	210					215					220				
Ile	Thr	Glu	Tyr	Ala	Asp	Arg	Leu	Leu	Glu	Asp	Leu	Asp	Glu	Leu	Asp
225					230					235					240
Trp	Pro	Glu	Ser	Ile	Lys	Asp	Met	Gln	Arg	Asn	Trp	Ile	Gly	Arg	Ser
			245						250					255	
Glu	Gly	Ala	Lys	Val	Thr	Phe	Lys	Ile	Glu	Gln	Ser	Asp	Gln	Asn	Ile
			260					265					270		
Glu	Val	Phe	Thr	Thr	Arg	Pro	Asp	Thr	Ile	Tyr	Gly	Thr	Ser	Phe	Leu
		275					280					285			
Val	Leu	Ser	Pro	Glu	His	Pro	Leu	Val	Asn	Glu	Ile	Thr	Thr	Ser	Asp
	290					295					300				
Lys	Glu	Gln	Glu	Val	Lys	Leu	Tyr	Gln	Asn	Glu	Ala	Ser	Lys	Lys	Ser
305					310					315					320
Asp	Leu	Glu	Arg	Thr	Asp	Leu	Ala	Lys	Glu	Lys	Thr	Gly	Val	Phe	Thr
			325						330					335	
Gly	Thr	Phe	Ala	Ile	Asn	Pro	Leu	Ser	Gly	Asp	Lys	Leu	Pro	Ile	Trp
			340					345					350		
Ile	Ala	Asp	Tyr	Val	Leu	Ser	Thr	Tyr	Gly	Thr	Gly	Ala	Val	Met	Ala
	355						360					365			
Val	Pro	Gly	His	Asp	Glu	Arg	Asp	His	Glu	Phe	Ala	Thr	Lys	Phe	Asn
	370					375					380				
Leu	Pro	Ile	Ile	Glu	Val	Ile	Glu	Gly	Gly	Glu	Val	Gln	Lys	Tyr	Ala
385					390					395					400
Tyr	Thr	Gly	Glu	Gly	Lys	His	Ile	Asn	Ser	Arg	Glu	Leu	Asp	Gly	Leu
			405						410					415	
Glu	Asn	Glu	Ala	Ala	Ile	Ser	Lys	Ala	Ile	Glu	Leu	Leu	Glu	Ser	Lys
			420					425					430		
Gly	Ala	Gly	Glu	Lys	Lys	Val	Asn	Tyr	Lys	Leu	Arg	Asp	Trp	Leu	Phe
	435						440					445			
Ser	Arg	Gln	Arg	Tyr	Trp	Gly	Glu	Pro	Ile	Pro	Ile	Ile	His	Trp	Glu
	450					455					460				

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Asp Gly Ser Met Thr Thr Val Pro Glu Asp Glu Leu Pro Leu Leu Leu
465                               470                               475                               480
Pro Glu Thr Asp Glu Ile Lys Pro Ser Gly Thr Gly Glu Ser Pro Leu
                               485                               490                               495
Ala Asn Ile Asp Ala Phe Val Asn Val Ile Asp Glu Lys Thr Gly Met
                               500                               505                               510
Lys Gly Arg Arg Glu Thr Asn Thr Met Pro Gln Trp Ala Gly Ser Cys
                               515                               520                               525
Trp Tyr Tyr Leu Arg Tyr Ile Asp Pro His Asn Glu Lys Met Ile Ala
530                               535                               540
Asp Pro Glu Lys Leu Lys His Trp Leu Pro Val Asp Leu Tyr Ile Gly
545                               550                               555                               560
Gly Val Glu His Ala Val Leu His Leu Leu Tyr Ala Arg Phe Trp His
                               565                               570                               575
Lys Val Leu Tyr Asp Leu Gly Val Val Pro Thr Lys Glu Pro Phe Gln
                               580                               585                               590
Lys Leu Tyr Asn Gln Gly Met Ile Leu Gly Glu Gly Asn Glu Lys Met
                               595                               600                               605
Ser Lys Ser Lys Gly Asn Val Ile Asn Pro Asp Asp Ile Val Ala Ser
610                               615                               620
His Gly Ala Asp Thr Leu Arg Leu Tyr Glu Met Phe Met Gly Pro Leu
625                               630                               635                               640
Asp Ala Ala Ile Ala Trp Ser Glu Lys Gly Leu Asp Gly Ser Arg Arg
                               645                               650                               655
Phe Leu Asp Arg Val Trp Arg Leu Ile Ile Thr Asp Glu Asn Ser Ile
660                               665                               670
Asn Lys Lys Ile Val Asp Ser Asn Asn His Ser Leu Asp Lys Val Tyr
675                               680                               685
Asn Gln Thr Val Lys Lys Val Thr Glu Asp Phe Asp Thr Leu Ser Phe
690                               695                               700
Asn Thr Ala Ile Ser Gln Leu Met Val Phe Ile Asn Glu Cys Tyr Lys
705                               710                               715                               720
Thr Asn Glu Val Tyr Lys Pro Tyr Ile Glu Gly Phe Val Lys Met Leu
725                               730                               735
Ser Pro Ile Ala Pro His Ile Gly Glu Glu Leu Trp Asp Arg Leu Gly
740                               745                               750
His Glu Asn Thr Ile Thr Tyr Gln Pro Trp Pro Thr Phe Asp Glu Ser
755                               760                               765
Leu Leu Val Asp Asp Glu Val Glu Ile Val Val Gln Val Asn Gly Lys
770                               775                               780
Val Arg Ala Lys Ile Asn Ile Pro Lys Asp Leu Ser Lys Glu Glu Met
785                               790                               795                               800
Gln Asp Leu Ala Leu Ser Asn Asp Asn Val Lys Met Ser Ile Glu Gly
                               805                               810                               815
Lys Glu Val Lys Lys Val Ile Ala Val Pro Gln Lys Leu Val Asn Ile
820                               825                               830
Val Ala Lys
835

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<210> 6012

<211> 60

<212> PRT

<213> S.epidermidis

<400> 6012

Met Met Ala Asn Lys Lys Asp Ser Lys Leu Asn Tyr His Glu Glu Glu

1		5		10		15									
Asn	Ala	Met	Val	Thr	Asp	Leu	Asp	Asp	Leu	Lys	Glu	Leu	Gly	Lys	Glu
		20					25					30			
Met	Glu	Gln	Ile	Ser	Gln	Glu	Asn	Asp	Glu	Glu	Lys	Leu	Asn	Gln	Ser
		35					40					45			
His	Asp	Asn	Glu	Val	Arg	Ser	Asp	Leu	Lys	Lys	Gln				
	50					55					60				

<210> 6013

<211> 1177

<212> PRT

<213> S.epidermidis

<400> 6013

Ile	Ile	Lys	Lys	Gly	Ser	Val	Ile	Met	Ser	Trp	Phe	Asp	Lys	Leu	Phe
1			5					10					15		
Gly	Asp	Asp	Asn	Gly	Ser	Asn	Asp	Asp	Leu	Leu	Arg	Lys	Asn	Lys	Asn
			20				25					30			
Arg	Arg	Gln	Ser	Gln	Gln	Ser	Lys	Gln	Asn	Asn	Gln	Asp	Ser	Leu	Leu
		35				40					45				
Pro	Gln	Asn	Asn	Asp	Ile	Tyr	Ser	Arg	Pro	Arg	Gly	Lys	Phe	Arg	Phe
	50				55						60				
Pro	Ile	Gln	Val	Ser	Glu	Asn	Glu	Tyr	Thr	Gln	Lys	Asn	Glu	Asn	Tyr
65				70				75					80		
Asn	Glu	His	Asn	Gln	Glu	Glu	Thr	Asn	Asp	Ile	Met	Arg	Ser	Tyr	Asn
			85					90					95		
Gln	His	Asp	Asn	Pro	Glu	Phe	Asp	Ser	Ser	Gly	Lys	Arg	His	Arg	Arg
		100					105					110			
Arg	Arg	Gln	Ala	Tyr	Ser	Lys	His	Asp	Gln	Ser	Lys	Ile	Thr	Gln	Gln
		115				120						125			
Lys	Gln	Phe	Ala	Asp	Asn	Asn	Tyr	Thr	Asn	Asn	Asn	Ser	Val	Phe	Asn
	130					135					140				
Gln	Asn	Asp	Asn	Lys	Lys	Ser	Ser	Gln	Gln	Arg	Lys	Ser	Ile	Gln	Ser
145				150				155						160	
Glu	Asn	Ile	Lys	Asn	Lys	Ala	Asn	Thr	Lys	Asn	Thr	Ser	Thr	Ser	Pro
			165				170						175		
Glu	Phe	Thr	Tyr	Leu	Asn	His	Ser	Phe	Lys	Ser	Ser	Glu	Val	Pro	Ser
		180				185						190			
Ala	Ile	Phe	Gly	Thr	Lys	Lys	Arg	Arg	Pro	Ile	Glu	Asn	Gly	Val	Ile
	195					200					205				
Pro	Pro	Glu	His	Lys	Glu	Leu	Asn	Asp	Lys	Glu	Ile	Val	Gln	Gln	Asp
	210				215						220				
Glu	Val	Ser	His	Ser	Thr	Lys	Ser	Ile	Asp	Ala	Ser	Lys	Asn	Val	Ser
225				230					235					240	
Asn	Ser	Asn	Asp	Asn	Asn	Ile	Glu	Lys	Asn	Gln	Gln	Lys	Lys	Gln	Gln
			245					250						255	
Thr	Thr	Ala	Gln	Thr	Glu	Ser	Ser	Ser	Glu	Asn	Met	His	Asn	Val	Glu
		260				265							270		
Lys	Ser	Asn	Tyr	Gln	Thr	Thr	Lys	Arg	Lys	Thr	Pro	Asn	Tyr	Ser	Lys
		275				280						285			
Val	Asp	Asn	Thr	Ile	Asn	Ile	Glu	Asn	Ile	Tyr	Ala	Ser	Gln	Ile	Val
	290				295						300				
Glu	Glu	Ile	Arg	Arg	Glu	Arg	Glu	Arg	Lys	Val	Leu	Gln	Lys	Arg	Arg
305				310					315					320	
Phe	Lys	Lys	Ala	Leu	Gln	Gln	Lys	Arg	Gln	Gln	Asn	Gln	Gln	Ser	Glu
			325					330						335	

Glu Asp Ser Ile Gln Lys Ala Ile Asp Glu Met Tyr Ala Lys Gln Ala
 340 345 350
 Gln His Tyr Thr Gly Glu Ser Ser Leu Asp Leu Glu Asn Glu Ser Asn
 355 360 365
 Gln Asp Ser Ser Ser Asn Ser Leu Glu Lys Gln Ser Asn Ser Ser Asn
 370 375 380
 Ile Asp Asn Lys Glu Ala Gln Asn Asn Thr Pro Leu Phe Asn Tyr Glu
 385 390 395 400
 Glu Ile Asp Leu Asp Thr Thr Ser Asp Val Tyr Lys Val Asn Glu Glu
 405 410 415
 Glu Thr Glu Ser Lys Asn Asp Glu Asp Leu Val Ser Ser Asn His Tyr
 420 425 430
 His Ser Asn Asp Asp Ala Glu Val Glu Asp Ala Glu Tyr His Glu Leu
 435 440 445
 Asp Asp Asn Arg Gln Gln Asn Gln Ser Asn Ser Gln Asp Asp Ile Ile
 450 455 460
 Ser Ser Lys Ser Ser Thr Ser Asn Met Tyr Asp Asn Ala Ile Ser Ala
 465 470 475 480
 Ser Val Asp Asn Asn Thr Glu Arg Ala Lys Ser Asn Glu Asp Lys Asn
 485 490 495
 Asp Thr Glu Ile Thr His Leu Asp Gly Thr Thr Ser Ala Lys Val Ser
 500 505 510
 Asp Glu Lys Ile Glu Ser Asn Thr Asn Asn His Leu Glu Gln Asp Lys
 515 520 525
 Asn Val Lys Leu Lys Asn Val Asn Ser Leu Lys Ser Ser Asn Ser Asp
 530 535 540
 Thr Gly Gln Thr Arg Lys Gln Arg Phe Gly Gly Ser Arg Pro Phe Asn
 545 550 555 560
 Val Leu Met Thr Pro Ser Asp Lys Lys Arg Met Met Asp Gln Asn His
 565 570 575
 Lys Lys Val Ser Val Pro Glu Leu Lys Pro Glu Lys Gln Ala Asn Ala
 580 585 590
 Asn His Arg Lys Asp Ser Glu Ser Asn Lys Ser Glu Glu Phe Lys Gln
 595 600 605
 Ile Asn Thr Asn Arg Glu Thr Asp Ser Asn Ser Tyr Glu Ser Asn Gly
 610 615 620
 Ile Glu His Asp Met Asn Ser Ser Ser Asp Glu His Val Tyr Glu Thr
 625 630 635 640
 Pro Ser Lys Gln Gln Asp Glu Gln Ile Gln Lys Leu Gln Asp Asp Phe
 645 650 655
 His Phe Glu Asn Ala Asn His Ala Lys Ile Asn Asn Ser Asn Glu Thr
 660 665 670
 Gly Asn Gln Ser Asn Ile Ser His Ser Lys Arg Ser Gln Tyr Ser Thr
 675 680 685
 Asn Glu Ser Lys Asn Ile Asp Thr Gln Thr Ser Asn Ser Ser Thr Ser
 690 695 700
 Asn Gln Asn Phe Gln Arg Ile Arg Lys Gly Pro Asn Ile Lys Leu Pro
 705 710 715 720
 Ser Tyr Gln Leu Leu Glu Ala Pro Glu Pro His Glu Lys Asp Gln Asp
 725 730 735
 Trp Ile Asp Asn Lys Lys Gln Glu Leu Asn Asp Ala Leu Tyr Tyr Phe
 740 745 750
 Asn Val Pro Ala Glu Val Lys Asn Val Thr Glu Gly Pro Ser Val Thr
 755 760 765
 Arg Phe Glu Leu Ser Val Glu Lys Gly Val Lys Val Ser Arg Ile Thr
 770 775 780

<400> 6014

Lys Met Trp Lys Trp Glu Thr Glu Asn Asp Ala Lys Gly Val Val Val
 1 5 10 15
 Ile Ala His Asn Ile Leu Glu His Thr Gly Arg Tyr Ala Tyr Val Ile
 20 25 30
 Thr Met Phe Arg Arg Asn Gly Tyr His Val Ile Met Gly Asp Leu Pro
 35 40 45
 Gly Gln Gly Gln Thr Ser Arg Ala Gln Lys Gly Gln Ile Asp Asp Phe
 50 55 60
 Asn Thr Tyr His Glu Asn Ile Leu Glu Trp Ile Lys Ile Ala Asn Glu
 65 70 75 80
 Tyr Lys Ile Pro Thr Phe Val Leu Gly Val Gly Leu Gly Gly Leu Ile
 85 90 95
 Ile Leu Asn Leu Leu Glu Lys Thr Glu Leu Pro Ile Glu Gly Ile Leu
 100 105 110
 Leu Phe Ser Pro Met Leu Glu Leu Lys Arg Asp Tyr Lys Gly Cys Lys
 115 120 125
 Asn Lys Leu Ile Ser Asn Val Gly Lys Ile Ser Lys Asp Thr Arg Phe
 130 135 140
 Lys Val Gly Ile Thr Pro Gln Asp Leu Thr Arg Asn Asp Glu Ile Ile
 145 150 155 160
 Glu Glu Thr Ala Asn Asp Gly Leu Met Leu Lys Lys Val Thr Tyr Ser
 165 170 175
 Trp Tyr Asn Leu Ile Asn Glu Lys Met Lys Glu Thr Met Asp His Ile
 180 185 190
 Arg Asp Ile Lys Pro Ile Ser Ala Leu Ile Met Tyr Gly Thr Asn Asp
 195 200 205
 Lys Ile Leu Glu Thr Gln Ser Ile Asn Glu Met Lys Asp Lys Leu Lys
 210 215 220
 Ser Lys Glu Met Tyr Phe Lys Val Trp Asp Gly Leu Tyr His Glu Ile
 225 230 235 240
 His Asn Glu Pro Glu Arg Asp Leu Val Met Arg Tyr Val Leu Ser Phe
 245 250 255
 Leu Asn Asn Ser Val Asn Thr Met Gly Phe Ile Val Asn Glu Glu Glu
 260 265 270
 Ile Glu Asp Ile
 275

<210> 6015

<211> 326

<212> PRT

<213> S.epidermidis

<400> 6015

Ile Pro Asn Leu Thr Ser Leu Ile Gln Ile Lys Asp Leu Lys Gly Arg
 1 5 10 15
 Phe Leu Leu Met Thr Lys Thr Ile Gly Leu Leu Val Met Ala Tyr Gly
 20 25 30
 Thr Pro Tyr Lys Glu Ser Asp Ile Glu Pro Tyr Tyr Thr Asp Ile Arg
 35 40 45
 Arg Gly Lys Lys Pro Thr Glu Glu Glu Leu Gln Asp Leu Lys Asp Arg
 50 55 60
 Tyr Glu Phe Ile Gly Gly Leu Ser Pro Leu Ala Gly Thr Thr Asp Arg
 65 70 75 80
 Gln Ala Glu Ala Leu Leu Glu Ala Leu Asn Lys Glu Gln Asp Asp Val
 85 90 95

Asn Phe Lys Leu Tyr Leu Gly Leu Lys His Ile Ser Pro Tyr Ile Glu
 100 105 110
 Glu Ala Val Glu Gln Met His Asn Asp Gly Ile Lys Glu Ala Val Thr
 115 120 125
 Val Val Leu Ala Pro His Tyr Ser Ser Phe Ser Val Gly Ser Tyr Asp
 130 135 140
 Gln Arg Ala Gln Glu Lys Ala Asp Glu Tyr Gly Ile Gln Leu Thr His
 145 150 155 160
 Ile Lys His Tyr Tyr Gln Gln Pro Lys Phe Ile Lys Tyr Trp Thr Glu
 165 170 175
 Lys Ile Asn Glu Thr Leu Glu Gln Ile Pro Asn Gln Glu His Asp Glu
 180 185 190
 Thr Val Leu Val Val Ser Ala His Ser Leu Pro Lys Gly Leu Ile Glu
 195 200 205
 Arg Asn Asn Asp Pro Tyr Pro His Glu Leu His Glu Thr Ala Glu Ile
 210 215 220
 Leu Lys Gln Glu Ser Asn Ile Ile His Val Ala Glu Gly Trp Gln Ser
 225 230 235 240
 Glu Gly Asn Thr Gly Thr Pro Trp Leu Gly Pro Asp Val Gln Asp Leu
 245 250 255
 Thr Arg Asp Leu Tyr Lys Glu His Gln Phe Lys His Phe Ile Tyr Thr
 260 265 270
 Pro Val Gly Phe Val Cys Glu His Leu Glu Val Leu Tyr Asp Asn Asp
 275 280 285
 Tyr Glu Cys Lys Val Val Cys Asp Asp Ile Gly Val Asn Tyr Tyr Arg
 290 295 300
 Pro Glu Met Pro Asn Thr His Pro Leu Phe Ile Gly Ala Ile Val Asp
 305 310 315 320
 Glu Ile Gln Ser His Ile
 325

<210> 6016

<211> 388

<212> PRT

<213> S.epidermidis

<400> 6016

Leu Lys Phe Glu Gly Glu Val Leu Ser Val Ile Tyr Leu Asp Asn Ala
 1 5 10 15
 Ala Thr Thr Lys Ala Asp Gln Asp Val Val Asp Ser Phe Val Lys Val
 20 25 30
 Asn Gln Thr Leu Tyr Phe Asn Pro Asn Ser Pro His His Ala Gly Val
 35 40 45
 Gln Ala Glu Gln Leu Leu Leu Lys Ala Lys Ser Glu Ile Asn Arg Ile
 50 55 60
 Leu Asn Leu Asn Asn Gln Phe Asp Ile Ile Phe Thr Ser Gly Ala Thr
 65 70 75 80
 Glu Ser Asn Asn Ile Leu Leu Lys Gly Ile Ala Tyr Met Lys Lys Glu
 85 90 95
 Thr Ala Asn Glu Ile Ile Thr Ser Val Leu Glu His Pro Ser Val Leu
 100 105 110
 Glu Val Met Arg Tyr Leu Glu Arg Glu Lys Gly Phe Lys Leu Lys Tyr
 115 120 125
 Val Asp Val Thr Lys Glu Gly Lys Leu Asp Thr Glu His Leu Lys Ser
 130 135 140
 Leu Met Thr Asp Lys Val Gly Leu Val Thr Cys Met Tyr Val Asn Asn

145 150 155 160
 Ile Met Gly Gln Ile Gln Pro Ile Glu Glu Ile Ala Asn Ile Val Lys
 165 170 175
 Asn Tyr Pro Arg Ala His Phe His Val Asp Ala Val Gln Ala Leu Gly
 180 185 190
 Lys Val Pro Met Gln Ile Asn His Ile Asp Ser Leu Ser Leu Ser Gly
 195 200 205
 His Lys Phe Asn Gly Leu Lys Gly Gln Gly Leu Leu Leu Leu Lys Asn
 210 215 220
 Ile Gln Asn Ile Glu Pro Ile Val His Gly Gly Gly Gln Glu Tyr Gly
 225 230 235 240
 Leu Arg Ser Gly Thr Ile Asn Leu Pro Met Ala Ile Ser Met Val Arg
 245 250 255
 Ala Ile Lys Asn Ala Val Asp Gln Thr Lys Glu Leu Asn Leu Arg Leu
 260 265 270
 Ser Asn Tyr Lys Asn Lys Leu Leu Ser Phe Leu Ala Glu Tyr Lys Asn
 275 280 285
 Val Phe Ile Asn Ser Pro Gln Asn Ala Ser Pro His Ile Ile Asn Ile
 290 295 300
 Gly Phe Pro Gly Val Lys Gly Glu Val Leu Val Asn Ala Phe Ser Lys
 305 310 315 320
 Gln Asn Val Met Val Ser Thr Thr Ser Ala Cys Ser Ser Lys Met Asn
 325 330 335
 Lys Leu Asn Glu Val Leu Leu Ala Met Glu Ile Ala Glu Ser Lys Ile
 340 345 350
 Glu Gly Ser Ile Arg Ile Ser Leu Gly Ala His Thr Thr Glu Asn Asp
 355 360 365
 Ile Leu Ser Phe Met Asn Ala Phe Glu Ser Val Tyr Lys Glu Ile Lys
 370 375 380
 Glu Leu Leu Lys
 385

<210> 6017
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6017
 Phe Gln Ser Glu Val Phe Leu Leu Val Tyr Lys Lys Thr Lys Val Val
 1 5 10 15
 Asn Gln Ile Val Asn Leu Val Leu Ile Ile Leu Leu Asn Pro Leu Val
 20 25 30
 Ser Phe Lys Ile Phe Ile Thr Ser Ser Leu Ala Cys
 35 40

<210> 6018
 <211> 73
 <212> PRT
 <213> S.epidermidis

<400> 6018
 Asn Asp Asp Leu Pro Leu Val Ile Val Arg His Ser Arg Phe Val Pro
 1 5 10 15
 Val Gln Glu Leu Val Gln Val Leu Ile Ile Lys Val Gly Asn Thr Ala
 20 25 30
 Leu Tyr Ile Pro Pro Ile Ile Arg Phe Ile Tyr Phe Ser Lys Asn Ser

35 40 45
 Glu Tyr Leu Lys Pro Leu Leu Tyr Ser Tyr His Ile Ile Lys Thr Phe
 50 55 60
 Thr Cys Leu Lys Phe Val Ile Ala Ile
 65 70

<210> 6019
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6019
 Thr Gly Asn Asp Ile Ile Lys Leu Pro Gly His Cys Thr Arg Val Val
 1 5 10 15
 Ala Met Ala Thr Leu Phe Phe Tyr Thr Lys Lys Ala Thr Lys Lys Ser
 20 25 30
 Leu Leu Lys Val Leu Phe Leu Phe Ile Lys Ile His
 35 40

<210> 6020
 <211> 554
 <212> PRT
 <213> S.epidermidis

<400> 6020
 Val Met Ser Glu Ser Lys Glu Met Val Arg Gly Thr Phe Leu Ile Thr
 1 5 10 15
 Ile Ser Ile Leu Ile Thr Lys Val Leu Gly Val Leu Phe Ile Ile Pro
 20 25 30
 Phe Thr Ala Leu Ile Gly Gly Gln Ala Asn Met Ala Pro Phe Thr Tyr
 35 40 45
 Ala Tyr Ala Pro Tyr Asn Ile Ala Ile Ala Ile Ala Thr Ala Gly Val
 50 55 60
 Pro Leu Ala Ala Ser Lys Tyr Val Ala Lys Tyr Asn Ala Leu Gly Ala
 65 70 75 80
 Tyr Lys Val Ser Gln Lys Phe Tyr Lys Ser Ser Phe Val Val Met Ser
 85 90 95
 Ile Thr Gly Ile Val Gly Phe Leu Val Leu Tyr Leu Leu Ala Pro Tyr
 100 105 110
 Ile Ala Glu Leu Thr Leu Ser Arg Asn Thr His Gly Asn Ser Gly Trp
 115 120 125
 Thr Val Ala Asp Ile Thr Trp Ile Ile Arg Ile Ile Ser Met Val Val
 130 135 140
 Ile Phe Ile Pro Val Leu Ala Thr Trp Arg Gly Ile Phe Gln Gly Tyr
 145 150 155 160
 Lys Ser Met Gly Pro Thr Ala Val Ser Glu Val Thr Glu Gln Ile Ala
 165 170 175
 Arg Ile Val Phe Ile Leu Val Gly Ser Tyr Leu Thr Leu Asn Val Phe
 180 185 190
 Gly Gly Thr Val Leu Gln Ala Asn Gly Ile Ala Thr Phe Ala Ala Ala
 195 200 205
 Ile Gly Ala Ile Ala Gly Ile Leu Thr Leu Trp Tyr Tyr Trp Ile Lys
 210 215 220
 Arg Arg Lys Asn Ile Lys Lys Met Val Asp Ser Asp Thr Ala Asn Leu
 225 230 235 240
 Asn Val Ser Tyr Gly Lys Met Tyr Lys Glu Ile Ile Ala Tyr Ser Ile

245 250 255
 Pro Phe Val Ile Val Ser Leu Asn Phe Pro Leu Phe Asn Leu Val Asp
 260 265 270
 Gln Phe Thr His Asn Gly Ala Leu Asn Leu Val Gly Val Lys Pro Gly
 275 280 285
 Leu Gln Asp Ile Phe Phe Asn Met Leu Asn Met Ser Thr Asn Lys Ile
 290 295 300
 Val Met Ile Pro Thr Ser Leu Ser Ala Gly Phe Ala Val Ser Leu Ile
 305 310 315 320
 Pro Phe Ile Thr Lys Thr Tyr Glu Glu Gly Arg Tyr Ala Glu Met His
 325 330 335
 Arg Gln Ile Arg Thr Ser Ile Gly Val Leu Met Phe Ile Thr Val Pro
 340 345 350
 Ala Ser Ile Gly Ile Met Ala Leu Ala Gln Pro Leu Phe Thr Val Phe
 355 360 365
 Tyr Gly Phe Asp Pro Val Val His Gly His Asp Pro Asn Phe Asp Gly
 370 375 380
 Ser Arg Leu Leu Phe Tyr Tyr Ala Pro Val Ala Ile Leu Ile Ser Leu
 385 390 395 400
 Leu Ser Val Thr Ala Ser Met Leu Gln Gly Ile Asp Lys Gln Lys Leu
 405 410 415
 Thr Val Phe Val Ile Leu Gly Ser Val Leu Ile Lys Leu Ile Leu Asn
 420 425 430
 Tyr Pro Leu Ile Met Leu Leu His Thr Pro Gly Ala Val Leu Ser Thr
 435 440 445
 Ala Ile Ala Leu Leu Phe Ala Ile Cys Cys Asn Phe Tyr Ile Leu Lys
 450 455 460
 Lys Tyr Ala Asn Phe Lys Phe Ser Tyr Ser Trp Ile His Leu Ala Lys
 465 470 475 480
 Ile Ile Leu Ile Ser Ile Ile Met Met Ile Gly Val Glu Val Ile Phe
 485 490 495
 Phe Ile Leu Arg Leu Phe Leu Glu Pro Thr Arg Phe Asn Tyr Leu Ile
 500 505 510
 Ile Val Ala Ile Gly Val Ile Val Gly Ala Ile Ile Tyr Gly Gly Ile
 515 520 525
 Thr Ile Lys Thr Lys Leu Ala Asp Glu Phe Leu Gly Asp Ile Pro Ala
 530 535 540
 Lys Ile Arg Arg Lys Val Lys Met Leu Arg
 545 550

<210> 6021

<211> 208

<212> PRT

<213> S.epidermidis

<400> 6021

Arg Lys Ser Glu Ile Met Ser Lys Val Ile Gly Ile Thr Gly Gly Ile
 1 5 10 15
 Ala Thr Gly Lys Ser Thr Val Ser Glu Leu Leu Thr Ala Tyr Gly Phe
 20 25 30
 Lys Ile Val Asp Ala Asp Ile Ala Ser Arg Glu Ala Val Lys Lys Gly
 35 40 45
 Ser Lys Gly Leu Glu Gln Val Lys Glu Ile Phe Gly Glu Glu Ala Ile
 50 55 60
 Asp Glu Asn Gly Glu Met Asn Arg Gln Tyr Val Gly Glu Ile Val Phe
 65 70 75 80

Asn	His	Pro	Asp	Leu	Arg	Glu	Ala	Leu	Asn	Glu	Ile	Val	His	Pro	Ile
				85					90					95	
Val	Arg	Glu	Ile	Met	Glu	Gln	Glu	Lys	Asn	Asn	Tyr	Leu	Glu	His	Gly
			100					105					110		
Tyr	His	Val	Ile	Met	Asp	Ile	Pro	Leu	Leu	Tyr	Glu	Asn	Glu	Leu	Gln
		115					120					125			
Asp	Thr	Val	Asp	Glu	Val	Trp	Val	Val	Tyr	Thr	Ser	Glu	Ser	Ile	Gln
	130					135					140				
Ile	Asp	Arg	Leu	Met	Glu	Arg	Asn	Asn	Leu	Ser	Leu	Glu	Asp	Ala	Lys
145					150					155					160
Ala	Arg	Val	Tyr	Ser	Gln	Ile	Ser	Ile	Asp	Lys	Lys	Ser	Arg	Met	Ala
				165					170					175	
Asp	His	Val	Ile	Asp	Asn	Leu	Gly	Asp	Lys	Leu	Glu	Leu	Lys	Gln	Asn
			180					185					190		
Leu	Gln	Lys	Leu	Leu	Glu	Glu	Glu	Gly	Tyr	Ile	Gln	Ser	Glu	Ser	Glu
		195					200					205			

<210> 6022

<211> 48

<212> PRT

<213> S.epidermidis

<400> 6022

Lys	Leu	Asn	Glu	Leu	Lys	Ile	Ile	Lys	Lys	Phe	Lys	Lys	Asp	Asn	Phe
1				5					10					15	
Tyr	Ile	Ile	Ser	Ile	Glu	Ile	Val	Phe	Ile	Tyr	Leu	Ser	Trp	Thr	Phe
			20					25					30		
Leu	Ser	Gln	Leu	Leu	Tyr	Phe	Phe	Ile	Ile	Thr	Ile	Leu	Cys	Gln	Leu
		35					40					45			

<210> 6023

<211> 85

<212> PRT

<213> S.epidermidis

<400> 6023

Met	Thr	Leu	Asp	Met	Pro	Ala	Ser	Met	Ile	Leu	Ser	Thr	Gln	Gly	Gly
1				5					10					15	
Val	Glu	Pro	Trp	Cys	Val	Gln	Gly	Ser	Asn	Glu	Thr	Tyr	Met	Val	Ala
			20					25					30		
Pro	Trp	Val	Phe	Lys	Pro	Ala	Ile	Ser	Ile	Ala	Cys	Thr	Ser	Ala	Cys
		35					40					45			
Leu	Ser	Pro	Phe	Phe	Lys	Cys	Ala	Pro	Lys	Pro	Thr	Ile	Leu	Pro	Phe
	50					55					60				
Leu	Thr	Thr	Thr	Asp	Pro	Thr	Gly	Gly	Leu	Thr	Pro	Val	Cys	Pro	Phe
65					70					75					80
Thr	Ile	Phe	Ala	Asn											
				85											

<210> 6024

<211> 315

<212> PRT

<213> S.epidermidis

<400> 6024

Leu	Met	Leu	Asp	Phe	Glu	Lys	Pro	Leu	Phe	Glu	Ile	Arg	Asn	Lys	Ile
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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1           5           10           15
Asp Ser Leu Lys Glu Ser Gln Glu Lys Asn Glu Val Asp Leu Gln Asp
20           25           30
Glu Ile Asp Met Leu Glu Ala Ser Leu Lys Arg Glu Thr Thr Lys Val
35           40           45
Tyr Thr Asn Leu Lys Pro Trp Asp Arg Val Gln Ile Ala Arg Leu Pro
50           55           60
Glu Arg Pro Thr Thr Leu Asp Tyr Ile Pro Tyr Ile Phe Asp Ser Phe
65           70           75
Ile Glu Leu His Gly Asp Arg Ser Phe Arg Asp Asp Pro Ala Met Ile
85           90           95
Gly Gly Ile Gly Tyr Leu Asp Gly Lys Ser Val Thr Val Ile Gly Gln
100          105          110
Gln Arg Gly Lys Asp Thr Lys Asp Asn Ile Tyr Arg Asn Phe Gly Met
115          120          125
Ala His Pro Glu Gly Tyr Arg Lys Ala Leu Arg Leu Met Lys Gln Ala
130          135          140
Glu Lys Phe Asn Arg Pro Ile Phe Thr Phe Ile Asp Thr Lys Gly Ala
145          150          155
Tyr Pro Gly Lys Ala Ala Glu Glu Arg Gly Gln Ser Glu Ser Ile Ala
165          170          175
Lys Asn Leu Met Glu Met Ala Ser Leu Thr Val Pro Val Ile Ala Val
180          185          190
Val Ile Gly Glu Gly Gly Ser Gly Gly Ala Leu Gly Ile Gly Ile Ser
195          200          205
Asn Arg Val Leu Met Leu Glu Asn Ser Thr Tyr Ser Val Ile Ser Pro
210          215          220
Glu Gly Ala Ala Ala Leu Leu Trp Lys Asp Ser Asn Leu Ala Gln Ile
225          230          235
Ala Ala Glu Thr Met Lys Ile Thr Ala Leu Asp Leu Leu Asp Leu Gly
245          250          255
Ile Ile Asp Glu Val Ile Asn Glu Pro Leu Gly Gly Ala Gln Lys Asp
260          265          270
Glu Glu Val Gln Ala Leu Ser Ile Lys Lys Met Phe Leu Lys His Leu
275          280          285
Asn Glu Leu Asn Gln Leu Thr Pro Glu Glu Leu Ala Asn Asp Arg Phe
290          295          300
Glu Lys Phe Arg Lys Ile Gly Ser Val Val Glu
305          310          315

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<210> 6025

<211> 69

<212> PRT

<213> S.epidermidis

<400> 6025

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Arg His Leu Glu Ala Ser Asn Leu Ile Leu Ser Ile Ser Thr Ile Ile
1           5           10           15
Ile Phe Gln Leu Ile Ile Leu Leu Leu Leu Leu Phe Lys Tyr Arg
20           25           30
Asn Ile Ser Pro Leu Tyr Leu Phe Phe Ile Phe Phe Val Asn Tyr Lys
35           40           45
Lys Tyr Asn Ile Asp Asp Ile Trp Cys Ser Thr Leu Lys Ser Ile Thr
50           55           60
Ser Val Ile Lys Gly
65

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<400> 6026

Gln 1	Met	Ser	Glu	Gln 5	Glu	Lys	Asn	Gln	His 10	His	Tyr	Arg	Asn	Ser 15	Ser
Gln	Lys	Arg	His 20	Thr	Phe	Pro	Trp	Ile 25	Lys	Thr	Ile	Ile	Val 30	Ala	Ile
Ile	Ala	Gly 35	Ile	Ile	Gly	Ala	Leu 40	Leu	Val	Leu	Gly 45	Ile	Gly	Lys	Leu
Leu	Asn 50	Lys	Thr	Gly	Phe	Asn 55	Asn	Glu	Gly	Ala	Thr 60	Val	His	Gln	Val
Ser 65	Asn	Ser	His	Gly 70	Gly	Asn	Gln	Leu	Asp 75	Gly	Lys	Ser	Asn	Gln	Tyr 80
Lys	Ser	Val	His 85	Met	Ile	Lys	Asp 90	Val	Ser	Pro	Ala	Ile	Val 95	Gly	
Val	Ile	Asn 100	Met	Gln	Lys	Ser	Thr 105	Asn	Leu	Asp	Asp 110	Leu	Phe	Asn	Gly
Lys	Ala	Ser 115	Lys	Ser	Lys	Glu 120	Ala	Gly	Ile	Gly	Ser 125	Gly	Val	Ile	Tyr
Gln	Ile 130	Ser	Asp	Gly	Ser	Ala 135	Tyr	Ile	Val	Thr 140	Asn	Asn	His	Val	Val
Asp 145	Gly	Ala	Ser	Glu 150	Ile	Lys	Val	Gln	Leu	His 155	Asn	Ser	Lys	Gln	Val
Asp	Ala	Lys	Leu 165	Ile	Gly	Lys	Asp 170	Ala	Leu	Thr 175	Asp	Ile	Ala	Val	Leu
Lys	Ile	Lys 180	Asp	Thr	Lys	Gly 185	Ile	Lys	Ala	Ile	Gln 190	Phe	Ala	Asn	Ser
Ser	Lys	Val 195	Gln	Thr	Gly	Asp 200	Ser	Val	Phe	Ala	Met 205	Gly	Asn	Pro	Leu
Gly	Leu 210	Glu	Phe	Ala	Asn 215	Ser	Val	Thr	Ser	Gly 220	Ile	Ile	Ser	Ala	Ser
Glu 225	Arg	Thr	Ile	Asp 230	Ala	Asn	Thr	Ser	Ala 235	Gly	Asn	Thr	Lys	Val	Asn
Val	Leu	Gln	Thr 245	Asp	Ala	Ala 250	Ile	Asn	Pro 255	Gly	Asn	Ser	Gly	Gly	Ala
Leu	Val	Asp 260	Ile	Asn	Gly	Asn 265	Leu	Val	Gly 270	Ile	Asn	Ser	Met	Lys	Ile
Ala	Ala 275	Ala	Gln	Val	Glu	Gly 280	Ile	Gly	Phe 285	Ala	Ile	Pro	Ser	Asn	Glu
Val	Arg 290	Val	Thr	Ile	Glu	Gln 295	Leu	Val	Lys 300	His	Gly	Lys	Ile	Glu	Arg
Pro 305	Ser	Ile	Gly	Ile 310	Gly	Leu	Ile	Asn	Leu 315	Ser	Asp	Ile	Pro	Glu	Asn
Tyr	Arg	Lys	Glu 325	Leu	His	Thr	His	Lys	Asp 330	Lys	Gly	Val	Tyr	Val	Ala
Lys	Val	Asp 340	Ser	Glu	Asn	Ala	Ile	Lys 345	Lys	Gly	Asp 350	Ile	Ile	Thr	Gly
Ile	Asp 355	Gly	Lys	Gln	Ile	Lys	Asp 360	Asp	Thr	Asp	Leu 365	Arg	Thr	Tyr	Leu
Tyr	Glu 370	Ser	Lys	Lys	Pro	Gly 375	Glu	Met	Val 380	Thr	Leu	Lys	Val	Ile	Arg
Asp	Gly	Lys	Thr	Gln	Asp	Ile	Asn	Val	Lys	Leu	Lys	Lys	Gln	Ala	Ser


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<210> 6027
<211> 263
<212> PRT
<213> S.epidermidis
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Lys 1	His	Leu	Asp	Phe 5	Ile	Lys	Glu	Lys	Arg 10	Met	Pro	Ile	Glu	Tyr 15	Glu
Thr	His	Phe	Phe 20	Asn	Glu	Val	Thr	Tyr 25	Leu	Val	Asp	Tyr	Leu 30	Lys	Val
Lys	Ala	Leu	Met 35	Met	Ile	Pro	Lys 40	Asn	Lys	Lys	Asp	Ile 45	Lys	Arg	Ile
Val	Ile 50	Tyr	Leu	Arg	Gly 55	Gly	Lys	Gly	Gln	Val	Gly 60	Arg	Val	Arg	Ala
Ala 65	Arg	Leu	Met	Gln 70	Phe	Ala	Asn	Glu	Tyr 75	Thr	Leu	Val	Ile	Gly 80	Pro
Tyr	Tyr	Arg	Gly 85	Asn	Asn	Gly	Ser	Glu	Gly 90	Arg	Asp	Glu	Phe 95	Tyr	Arg
Gly	Asp	Leu	Asn 100	Asp	Val	Thr	His	Leu 105	Ile	Arg	Leu	Leu	Asn 110	Gln	Asn
Tyr	Pro	Ser 115	Ala	Phe	Ile	His	Met 120	Val	Gly	Phe	Ser	Arg 125	Gly	Gly	Leu
Gln	Gly 130	Leu	Leu	Thr	Phe 135	Asn	Asp	Leu	Pro	Val	Asp 140	Ser	Tyr	Met	Ile
Trp 145	Gly	Gly	Val	Ser	Asp 150	Ile	His	Leu	Met	Tyr 155	Glu	Glu	Arg	Val	Asp
Leu	Arg	Gly	Met	Leu 165	Arg	Arg	Met	Val	Gly 170	His	Pro	Lys	Lys	Asp 175	Ala
Lys	Ala	Tyr	Lys 180	Ser	Arg	Asp	Ala 185	Met	Gln	Phe	Ile	Lys	Lys	Asp 190	Ser
Pro	Pro 195	Ile	Leu	Ile	Ile	His	Gly 200	Gly	Lys	Asp	Ile	Gln	Val	Gly	Ile
His	Gln 210	Ala	Tyr	Asp	Leu	Glu 215	Lys	Lys	Leu	Lys	Ser 220	Lys	Gly	Ile	Tyr
Tyr 225	Gln	Thr	Tyr	Tyr	Gln 230	Leu	Asp	Glu	Gly	His 235	Val	Pro	Arg	Pro	Pro
Ala	Met	Arg	Asp 245	Val	Ile	Arg	Tyr	Ile	His 250	Gln	Trp	Met	Asn	Asp 255	Val
Glu	Asn	Lys	Asn 260	Leu	Asn	Ile									

<400> 6028

Lys 1	Gly	Met	Glu 5	Val	Ile	Ile	Met	Tyr	Gln 10	Thr	Ile	Val	Ile	Gly 15	Gly
Gly	Pro	Ser	Gly 20	Ala	Met	Ala	Ala	Val 25	Ala	Ala	Ser	Glu	Lys 30	Asn	Lys
Ser	Val	Leu	Leu	Ile	Glu	Lys	Lys	Lys	Gly	Leu	Gly	Arg	Lys	Leu	Lys

	35		40		45														
Ile	Ser	Gly	Gly	Gly	Arg	Cys	Asn	Val	Thr	Asn	Arg	Leu	Pro	Tyr	Asp				
	50					55					60								
Glu	Ile	Ile	Lys	Asn	Ile	Pro	Gly	Asn	Gly	Lys	Phe	Leu	Tyr	Ser	Pro				
65					70					75					80				
Phe	Ser	Val	Phe	Asp	Asn	Leu	Ser	Ile	Ile	Asn	Phe	Phe	Glu	Thr	Arg				
				85						90					95				
Gly	Val	Lys	Leu	Lys	Glu	Glu	Asp	His	Gly	Arg	Met	Phe	Pro	Val	Ser				
			100					105						110					
Asn	Lys	Ser	Gln	Asp	Val	Val	Asp	Val	Leu	Ile	Asn	Gln	Leu	Lys	Glu				
		115					120					125							
Asn	His	Val	Glu	Val	Lys	Glu	Glu	Thr	Pro	Val	Val	Ser	Val	Ser	Tyr				
	130					135					140								
Asp	His	Asn	Phe	Lys	Val	Lys	Thr	Gln	Ile	Gly	Glu	Phe	Glu	Ser	His				
145					150					155					160				
Ser	Leu	Ile	Ile	Ala	Thr	Gly	Gly	Thr	Ser	Val	Pro	Gln	Thr	Gly	Ser				
				165					170						175				
Thr	Gly	Asp	Gly	Tyr	Lys	Phe	Ala	Lys	Ser	Leu	Gly	His	Ser	Ile	Thr				
			180					185					190						
Glu	Leu	Phe	Pro	Thr	Glu	Val	Pro	Ile	Thr	Ser	Ser	Glu	Thr	Phe	Ile				
	195						200					205							
Lys	Ser	Asn	Arg	Leu	Lys	Gly	Leu	Ser	Leu	Lys	Asp	Val	Asn	Leu	Ser				
	210					215					220								
Val	Leu	Lys	Lys	Asn	Gly	Lys	Lys	Arg	Val	Ser	His	Gln	Met	Asp	Met				
225					230					235					240				
Ile	Phe	Thr	His	Phe	Gly	Ile	Ser	Gly	Pro	Ala	Ala	Leu	Arg	Cys	Ser				
				245					250						255				
Gln	Phe	Val	Tyr	Lys	Glu	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Asn	Ile	His				
		260						265					270						
Met	Gln	Leu	Asp	Val	Phe	Pro	Glu	Leu	Asn	Val	Asp	Gln	Leu	Ser	Gln				
		275					280					285							
Lys	Val	Arg	Lys	Ile	Leu	Asn	Ala	Glu	Pro	Asp	Lys	Tyr	Ile	Lys	Asn				
	290					295					300								
Ser	Leu	Arg	Gly	Leu	Ile	Glu	Glu	Arg	Tyr	Leu	Leu	Phe	Ile	Leu	Glu				
305					310					315					320				
Gln	Ser	Gly	Ile	Asn	Asp	Glu	Met	Thr	Ala	His	His	Leu	Ser	Asn	Gln				
				325					330						335				
Gln	Phe	Gln	Thr	Phe	Ile	Asn	Leu	Leu	Lys	Thr	Phe	Thr	Phe	Thr	Val				
			340					345					350						
Asp	Gly	Thr	Leu	Pro	Leu	Asp	Lys	Ala	Phe	Val	Thr	Gly	Gly	Gly	Ile				
	355					360						365							
Ser	Leu	Lys	Glu	Ile	Glu	Pro	Lys	Thr	Met	Met	Ser	Lys	Leu	Val	Pro				
	370					375					380								
Gly	Leu	Phe	Leu	Cys	Gly	Glu	Val	Leu	Asp	Ile	His	Gly	Tyr	Thr	Gly				
385					390					395					400				
Gly	Tyr	Asn	Ile	Thr	Ser	Ala	Leu	Val	Thr	Gly	His	Val	Ala	Gly	Met				
				405					410					415					
Phe	Ala	Gly	Glu	Phe	Lys	Ile	Asp	Gln	Asn	Lys									
			420				425												

<210> 6029

<211> 53

<212> PRT

<213> S.epidermidis

<400> 6029

His Thr Leu Leu Arg Asn Asn Phe Ile Thr Val Leu Val Ser Thr Ile
 1 5 10 15
 Lys Tyr Leu Val Ile Leu Trp Val Asn Thr Ile Ile Phe Ile Ser Met
 20 25 30
 Asn Tyr Lys Tyr Cys Tyr Thr Cys Asn Phe Cys Glu Lys Phe Leu Met
 35 40 45
 Tyr Pro Glu Tyr Glu
 50

<210> 6030

<211> 497

<212> PRT

<213> S.epidermidis

<400> 6030

Ala Gln Leu Leu Ile Phe Asn Lys Gln Val Gly Ile Ile Ile Arg Val
 1 5 10 15
 Tyr Asn Leu Glu Glu Cys Ile Val Asn Phe Trp Leu Gln Glu Gln Ala
 20 25 30
 Gln Ser Asn Gly Asn Arg Leu Ala Ile Val Thr Asn Gln Leu Ser Leu
 35 40 45
 Thr Tyr Glu Glu Leu Tyr His Arg Ala Lys Thr Ile Ala Glu Tyr Leu
 50 55 60
 Thr Ser Leu Asn Gln Lys Arg Ile Gly Leu Tyr Ile Ser Asn Asp Ile
 65 70 75 80
 Asp Ser Val Val Leu Ile His Ala Cys Trp Leu Ala His Ile Glu Ile
 85 90 95
 Ala Met Ile Asn Thr Arg Leu Thr Arg His Glu Met Ile Asn Gln Met
 100 105 110
 Asn Ser Val Asp Ile Ala Thr Ile Val His Thr Leu Pro Leu Glu Leu
 115 120 125
 Glu Gly Phe Asn Leu Tyr His Phe Asn Asp Leu Thr Gln Leu Asp Lys
 130 135 140
 His Asp Val Ser Gly Tyr Lys Phe Asn Leu Glu Ser Ile Ala Ser Ile
 145 150 155 160
 Met Phe Thr Ser Gly Thr Thr Gly Pro Gln Lys Ala Val Pro Gln Thr
 165 170 175
 Phe Asn Asn His Leu Ala Ser Ala Lys Gly Cys Lys Gln Ser Leu Gly
 180 185 190
 Phe Glu Gln Asn Thr Val Trp Leu Ser Val Leu Pro Ile Tyr His Ile
 195 200 205
 Ser Gly Leu Ser Val Ile Leu Arg Ala Val Ile Glu Gly Phe Thr Val
 210 215 220
 Arg Leu Val Lys Lys Phe Gln Thr Asp Asp Met Leu Thr Gln Ile Lys
 225 230 235 240
 Thr Tyr Pro Ile Thr His Met Ser Leu Val Pro Gln Thr Leu Lys Trp
 245 250 255
 Leu Met Asp Ala Gly Leu Thr Gln Pro Phe Ser Leu Glu Lys Ile Leu
 260 265 270
 Leu Gly Gly Ala Lys Leu Ser Pro Gln Leu Ile Glu Gln Ala Leu Thr
 275 280 285
 Tyr Arg Leu Pro Val Tyr Asn Ser Phe Gly Met Thr Glu Thr Cys Ser
 290 295 300
 Gln Phe Leu Thr Ala Ser Pro Gln Met Leu Lys Glu Arg Phe Asp Thr
 305 310 315 320
 Val Gly Lys Pro Ser Glu Asn Val Glu Val Lys Ile Lys Asn Pro Asn

CCITT = 6303000

325 330 335
 Ala Tyr Gly His Gly Glu Leu Leu Ile Lys Gly Glu Asn Val Met Asn
 340 345 350
 Gly Tyr Leu Tyr Pro Lys Tyr Leu Lys Asp Thr Phe Asp Asn Asp Gly
 355 360 365
 Tyr Phe Gln Thr Gly Asp Ile Ala Glu Ile Asp Asp Glu Gly Tyr Val
 370 375 380
 Ile Ile Tyr Asp Arg Arg Lys Asp Leu Ile Ile Ser Gly Gly Glu Asn
 385 390 395 400
 Ile Tyr Pro Tyr Gln Ile Glu Thr Ile Ala Lys Asp Phe Glu Gly Ile
 405 410 415
 Glu Asp Ala Val Cys Val Gly Ile Ser Asp Asp Thr Trp Gly Gln Val
 420 425 430
 Pro Ile Leu Tyr Tyr Val Thr Asn Gln Asp Ile Asn Gln Thr Glu Leu
 435 440 445
 Ile Glu His Phe Glu Asn His Leu Ala Arg Tyr Lys Ile Pro Lys Lys
 450 455 460
 Tyr Tyr Gln Val Lys Ser Leu Pro Tyr Thr Ser Thr Gly Lys Leu Gln
 465 470 475 480
 Arg Lys Lys Val Lys Ser Glu Asp Leu Asn Glu Gly Lys Asn Asn Glu
 485 490 495
 Ser

<210> 6031
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 6031
 Leu Thr Ala Leu Ile Ser Leu Asn Gln Ile Glu Lys Ala Ile Asn Ala
 1 5 10 15
 His Asp Cys Lys Thr Leu Gln Asp Leu Ser Asn Tyr Phe Asn Leu Pro
 20 25 30
 Thr Thr His Leu Phe Leu Thr Met
 35 40

<210> 6032
 <211> 490
 <212> PRT
 <213> S.epidermidis

<400> 6032
 Met Tyr Lys Leu Leu Gln His Leu Gly Arg Ser Leu Met Leu Pro Val
 1 5 10 15
 Ala Val Leu Pro Ala Ala Ala Ile Ile Val Gly Ile Gly His Val Leu
 20 25 30
 Asp Ala Leu Asn Ile Leu Pro Gln Ala Ala Leu Phe Phe Thr Ser Val
 35 40 45
 Gly Thr Thr Ile Leu Glu Gln Leu Gly Ile Leu Phe Ala Ile Gly Val
 50 55 60
 Ala Ile Gly Met Ala Lys Lys Asn Asp Gly Ala Val Ala Leu Ala Ala
 65 70 75 80
 Ala Leu Gly Phe Phe Ile Val Thr Val Val Leu Ser Pro Glu Lys Leu
 85 90 95
 Ala Thr Leu Leu Gln Ile Lys Glu Ser Lys Ile Asp Leu Ala Phe Ser

			100					105					110				
Gln	Met	Asn	Asn	Gly	Asn	Val	Phe	Val	Gly	Ile	Ile	Ile	Gly	Leu	Ile		
		115						120					125				
Ala	Ala	Tyr	Ser	Tyr	Asn	Lys	Phe	Ser	Glu	Thr	Asn	Leu	Pro	Met	Ala		
	130					135						140					
Leu	Ser	Phe	Phe	Ser	Gly	Lys	Arg	Leu	Val	Pro	Ile	Met	Thr	Ala	Phe		
145					150					155					160		
Phe	Cys	Thr	Ile	Leu	Ala	Ile	Ile	Leu	Leu	Leu	Ile	Trp	Pro	Pro	Val		
				165					170					175			
Tyr	Asn	Gly	Ile	Val	Thr	Phe	Gly	Lys	Trp	Ile	Val	Gly	Met	Gly	Pro		
		180						185					190				
Phe	Gly	Ala	Leu	Leu	Tyr	Gly	Phe	Asn	Arg	Leu	Leu	Ile	Pro	Thr			
		195					200					205					
Gly	Leu	His	His	Ala	Leu	Asn	Asn	Val	Phe	Trp	Phe	Asp	Thr	Ala	Gly		
	210					215					220						
Ile	Asn	Asp	Ile	Gly	Lys	Phe	Gln	Ser	Gly	Lys	Asn	Ala	Ile	Lys	Gly		
225					230					235					240		
Ile	Thr	Gly	Arg	Tyr	Gln	Ala	Gly	Phe	Phe	Pro	Val	Met	Met	Phe	Gly		
			245					250				255					
Val	Pro	Ala	Ala	Ala	Leu	Ala	Met	Tyr	His	Thr	Ala	Lys	Thr	Asn	Gln		
		260					265					270					
Lys	Lys	Gln	Val	Tyr	Ala	Trp	Phe	Leu	Ala	Ser	Ser	Val	Ser	Ala	Phe		
	275					280					285						
Phe	Val	Gly	Val	Thr	Glu	Pro	Ile	Glu	Phe	Ala	Phe	Met	Phe	Val	Ala		
	290					295				300							
Pro	Val	Leu	Phe	Val	Ile	His	Ala	Val	Leu	Thr	Gly	Leu	Ser	Leu	Phe		
305					310					315					320		
Ile	Ala	Ala	Met	Phe	His	Trp	Thr	Ala	Gly	Phe	Ser	Phe	Ser	Ala	Gly		
			325					330						335			
Leu	Ile	Asp	Tyr	Val	Leu	Ser	Leu	Val	Asn	Pro	Ile	Ser	Asn	Gln	Pro		
		340						345					350				
Trp	Met	Leu	Leu	Leu	Gln	Gly	Val	Val	Phe	Phe	Ile	Ile	Tyr	Tyr	Val		
	355					360						365					
Ile	Phe	Arg	Val	Val	Ile	Gln	Val	Phe	Asn	Leu	Ser	Thr	Ile	Gly	Arg		
	370				375						380						
Gly	Asp	Asn	Glu	Leu	Ile	Asp	Pro	Thr	Ser	Asn	Asp	Thr	Ser	Glu	Met		
385					390					395					400		
Glu	Val	Leu	Gln	Asn	Lys	Thr	Thr	Thr	Ser	Lys	Tyr	Tyr	Gln	Asn	Ala		
			405					410					415				
Lys	Arg	Ile	Leu	Asp	Gly	Leu	Gly	Gly	Lys	Glu	Asn	Ile	Ile	Ser	Leu		
		420					425					430					
Asn	His	Cys	Ala	Thr	Arg	Leu	Arg	Leu	Glu	Leu	Lys	Asp	Asn	Ser	Ile		
	435					440					445						
Ile	Asp	Glu	Gln	Lys	Ile	Lys	Asn	Ala	Gly	Ala	Ile	Gly	Ile	Thr	Gln		
	450				455					460							
Asn	Gly	His	His	Tyr	Thr	Gln	Val	Ile	Ile	Gly	Thr	His	Val	Gln	Gln		
465				470					475						480		
Val	Ala	Asn	Glu	Met	Asp	His	Gln	Met	Asn								
			485					490									

<210> 6033

<211> 91

<212> PRT

<213> S.epidermidis

<400> 6033

Ile Phe Ser Trp Arg Pro Leu Ser Met Leu Lys Lys Ile Leu Leu Ser
 1 5 10 15
 Leu Val Val Phe Tyr Gln Arg Phe Ile Ser Pro Leu Thr Pro Pro Thr
 20 25 30
 Cys Arg Phe Tyr Pro Thr Cys Ser Gln Tyr Thr Arg Glu Ala Ile Glu
 35 40 45
 Tyr His Gly Ala Leu Lys Gly Leu Tyr Leu Gly Val Arg Arg Ile Leu
 50 55 60
 Lys Cys His Pro Leu His Lys Gly Gly Phe Asp Pro Val Pro Leu Lys
 65 70 75 80
 Lys Asp Lys Asn Ser Lys Thr Thr His His
 85 90

<210> 6034

<211> 539

<212> PRT

<213> S.epidermidis

<400> 6034

Leu Asn Leu Trp Arg Leu Leu Asp Met Ser His Lys Ile Leu Val Ser
 1 5 10 15
 Asp Pro Ile Ser Glu Asp Gly Leu Gln Ser Ile Leu Lys His Pro Glu
 20 25 30
 Phe Asp Val Asp Ile Gln Thr Asp Leu Ser Glu Asn Asp Leu Val Asn
 35 40 45
 Met Ile Ser Thr Tyr Asp Ala Leu Ile Val Arg Ser Gln Thr Gln Val
 50 55 60
 Thr Glu Arg Ile Ile Asn Ala Ala Thr Asn Leu Lys Val Ile Ala Arg
 65 70 75 80
 Ala Gly Val Gly Val Asp Asn Ile Asn Ile Glu Ala Ala Thr Leu Lys
 85 90 95
 Gly Ile Leu Val Ile Asn Ala Pro Asp Gly Asn Thr Ile Ser Ala Thr
 100 105 110
 Glu His Ser Val Ala Met Leu Leu Ala Met Ala Arg Asn Ile Pro Gln
 115 120 125
 Ala His Gln Ser Leu Arg Asn Lys Glu Trp Asn Arg Lys Ala Phe Arg
 130 135 140
 Gly Val Glu Leu Tyr Gly Lys Thr Leu Gly Val Ile Gly Ala Gly Arg
 145 150 155 160
 Ile Gly Leu Gly Val Ala Lys Arg Ala Gln Ser Phe Gly Met Lys Ile
 165 170 175
 Leu Ala Phe Asp Pro Tyr Leu Thr Glu Asp Lys Ala Lys Ser Leu Asp
 180 185 190
 Ile Gln Ile Ala Thr Val Asp Glu Ile Ala Glu Lys Ser Asp Phe Val
 195 200 205
 Thr Val His Thr Pro Leu Thr Pro Lys Thr Arg Gly Ile Val Gly Ser
 210 215 220
 Ser Phe Phe Asn Lys Ala Lys Gln Asn Leu Gln Ile Ile Asn Val Ala
 225 230 235 240
 Arg Gly Gly Ile Ile Asp Glu Thr Ala Leu Ile Glu Ala Leu Asp Asn
 245 250 255
 Asn Leu Ile Asp Arg Ala Ala Ile Asp Val Phe Glu His Glu Pro Pro
 260 265 270
 Thr Asp Ser Pro Leu Ile Gln His Asp Lys Ile Ile Val Thr Pro His
 275 280 285
 Leu Gly Ala Ser Thr Val Glu Ala Gln Glu Lys Val Ala Val Ser Val

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      290                      295                      300
Ser Glu Glu Ile Ile Glu Ile Leu Thr Lys Gly Asn Val Glu His Ala
305                      310                      315                      320
Val Asn Ala Pro Lys Met Asp Leu Ser Lys Val Asp Lys Thr Thr Gln
      325                      330                      335
Ser Phe Ile Gly Leu Ser Thr Thr Ile Gly Glu Phe Ala Ile Gln Leu
      340                      345                      350
Leu Asp Gly Ala Pro Ser Glu Ile Lys Val Lys Tyr Ala Gly Asp Leu
      355                      360                      365
Ala Gln Asn Asp Thr Ser Leu Ile Thr Arg Thr Ile Ile Thr Asn Ile
      370                      375                      380
Leu Lys Glu Asp Leu Gly Asn Glu Val Asn Ile Ile Asn Ala Leu Ala
385                      390                      395                      400
Ile Leu Asn Gln Gln Gly Val Thr Tyr Asn Ile Glu Lys Gln Lys Lys
      405                      410                      415
His Ser Gly Phe Ser Ser Tyr Ile Glu Leu Glu Leu Val Asn Asp Gln
      420                      425                      430
Asp Lys Ile Lys Ile Gly Ala Thr Val Phe Ala Gly Phe Gly Pro Arg
      435                      440                      445
Ile Val Arg Ile Asn Asp Tyr Ser Leu Asp Phe Lys Pro Asn Gln Tyr
      450                      455                      460
Gln Leu Val Thr Cys His Lys Asp Lys Pro Gly Ile Val Gly Gln Thr
465                      470                      475                      480
Gly Asn Leu Leu Gly Ser His Gly Ile Asn Ile Ala Ser Met Thr Leu
      485                      490                      495
Gly Arg Asn Asp Ala Gly Gly Asp Ala Leu Met Ile Leu Ser Ile Asp
      500                      505                      510
Gln Gln Ala Ser Glu Glu Val Ile Lys Ile Leu Asn Glu Thr Ser Gly
      515                      520                      525
Phe Asn Lys Ile Ile Ser Thr Lys Leu Thr Ile
      530                      535

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<210> 6035

<211> 395

<212> PRT

<213> S.epidermidis

<400> 6035

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Ile Leu Leu Trp Glu Glu Cys Thr Met Gln Tyr Tyr Gln Pro Leu Leu
1      5      10      15
Leu Thr Pro Gly Pro Thr Pro Val Pro Glu Gln Ile Leu Ser Ala Val
      20      25      30
Gln Leu Pro Met Val Gly His Arg Ser Thr Asp Phe Glu Glu Ile Ala
      35      40      45
Ser Glu Ala Phe Lys Gly Leu Lys Pro Val Phe Gly Ser Lys Asn Glu
      50      55      60
Val Leu Ile Leu Thr Ser Ser Gly Thr Ser Val Leu Glu Ala Ser Met
      65      70      75      80
Leu Asn Ile Ala Asn Pro Asp Asp His Ile Val Ile Ile Val Ser Gly
      85      90      95
Ala Phe Gly Asn Arg Phe Lys Gln Ile Ala Gln Thr Tyr Tyr Asn His
      100      105      110
Val His Val Tyr Asp Val Asn Trp Gly Glu Ala Val Ile Val Asp Asp
      115      120      125
Phe Ile Thr Tyr Leu Lys Gln Leu Asn Val Pro Val Thr Ala Val Phe
      130      135      140

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Thr Gln Phe Cys Glu Thr Ser Thr Gly Val Ile His Pro Val His Gln
 145 150 155 160
 Leu Gly His Ala Leu Lys Ala Phe Asp Asn Ser Leu Tyr Phe Ile Val
 165 170 175
 Asp Gly Val Ser Cys Ile Gly Ala Val Asp Val Asp Leu Thr Lys Asp
 180 185 190
 Lys Ile Asp Val Leu Val Ser Gly Ser Gln Lys Ala Ile Met Leu Pro
 195 200 205
 Pro Gly Leu Ala Phe Val Ala Tyr Ser Asp Arg Ala Lys Lys Arg Phe
 210 215 220
 Ala Asp Val Lys Thr Pro Arg Phe Tyr Leu Asp Leu Asn Lys Tyr Ile
 225 230 235 240
 Lys Ser Gln Glu Gln Asn Ser Thr Pro Phe Thr Pro Asn Val Gly Leu
 245 250 255
 Phe Arg Gly Ile Asn Ala Tyr Val Glu Leu Val Lys Lys Glu Gly Leu
 260 265 270
 Asn His Val Ile Ser Arg His Phe Lys Ile Arg Asn Ala Leu Arg Ala
 275 280 285
 Ala Leu Lys Ala Leu Glu Leu Glu Leu Leu Val Lys Asp Asp Ala His
 290 295 300
 Ala Ser Pro Thr Val Thr Ser Phe Val Pro Lys Asn Gln Glu Glu Leu
 305 310 315 320
 Asn Ile Ile Lys Asn Gln Leu Lys Ser Gln Phe Asn Ile Thr Ile Ala
 325 330 335
 Gly Gly Gln Gly His Leu Lys Gly Gln Ile Leu Arg Ile Gly His Met
 340 345 350
 Gly Lys Ile Ser Pro Phe Asp Ile Leu Ala Val Val Ser Ala Leu Glu
 355 360 365
 Ile Ile Leu Thr Ser Asn Arg Asn Val Asn Tyr Ile Gly Thr Gly Ile
 370 375 380
 Thr Gln Phe Met Glu Val Ile Arg His Glu Ser
 385 390 395

<210> 6036

<211> 388

<212> PRT

<213> S.epidermidis

<400> 6036

Asn Ser Ile Cys Asn Phe Lys Lys Val Ala Lys Leu Met Asn Asn Lys
 1 5 10 15
 Leu Lys Lys Glu Ile Ile Asp Phe Ala His Ser Ile Gly Ile Asp Ser
 20 25 30
 Ile Gly Phe Thr Thr Ala Asp Pro Phe Asp Glu Leu Lys Gln Lys Leu
 35 40 45
 Glu Glu Tyr His Ala Lys Gly Tyr Ala Ser Gly Phe Glu Glu Ser Asn
 50 55 60
 Ile Ser Leu Arg Thr Glu Pro Lys Leu Ser Leu Pro Ser Ala Arg Ser
 65 70 75 80
 Ile Ile Ala Ile Ala Val Gly Tyr Pro Asn Lys Leu Lys Gly Ala Pro
 85 90 95
 Lys Ser Val Lys Gly Asp Arg Arg Gly Met Phe Ala Arg Ala Ser Trp
 100 105 110
 Gly Gln Asp Tyr His Ser Ile Met Arg Lys Arg Leu Asp Lys Leu Ala
 115 120 125
 Asp Phe Ile Lys Glu Lys Val Pro Asp Val Glu Ile Gln Ser Met Val


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      130                      135                      140
Asp Thr Gly Val Leu Ser Asp Arg Ala Val Ala Glu Arg Ala Gly Leu
145                      150                      155                      160
Gly Phe Thr Gly Arg Asn Gly Phe Val Ile Ser Pro Glu Leu Gly Thr
      165                      170                      175
Trp Ser Tyr Leu Gly Glu Met Leu Val Ser Ile Pro Phe Glu Pro Asp
      180                      185                      190
Asp Pro Leu Leu Asp Ser Cys Gly Asp Cys Thr Ile Cys Val Asp Arg
      195                      200                      205
Cys Pro Thr Gly Ala Leu Val Gly Asn Gly Gln Leu Asn Ser Gln Lys
      210                      215                      220
Cys Ile Ser Phe Leu Thr Gln Thr Lys Gly Tyr Leu Gln Asp Glu Tyr
225                      230                      235                      240
Arg Tyr Lys Ile Gly Asn Arg Leu Tyr Gly Cys Asp Thr Cys Gln Gln
      245                      250                      255
Val Cys Pro Lys Asn Arg Gly Ile Asn Thr Gln His Asp Asp Ile Val
      260                      265                      270
Leu Glu Pro Glu Ile Leu Lys Pro Arg Leu Val Pro Leu Leu Gln Met
      275                      280                      285
Ser Asn Lys Lys Phe Lys Ser Thr Tyr Gly His Leu Ala Gly Ala Trp
290                      295                      300
Arg Gly Lys Lys Pro Ile Gln Arg Asn Ala Ile Ile Ala Leu Ala His
305                      310                      315                      320
Phe Lys Glu Glu Ser Ala Ile Pro Glu Leu Lys Glu Val Ala Leu Asn
      325                      330                      335
Asp Pro Arg Pro Met Ile Arg Gly Thr Ala Tyr Trp Ala Ile Gly Gln
      340                      345                      350
Ile Leu Glu Asp Asp Ala Ile Ser Phe Ile Asp Glu His Tyr Glu Asn
      355                      360                      365
Glu Ile Glu Glu Val Gln Leu Glu Met Lys Lys Gly Leu Gln Met Arg
370                      375                      380
Arg Glu Gln Lys
385

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<210> 6037

<211> 322

<212> PRT

<213> S.epidermidis

<400> 6037

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Lys Gly Lys Cys Ile Met Gly Asn Tyr Phe Pro Tyr Ala Phe Glu Asp
1      5      10      15
Lys Arg Tyr His Thr Trp Asn Tyr His Leu Lys Asn Lys Phe Gly Gln
      20      25      30
Lys Ile Phe Lys Val Ala Leu Asp Gly Gly Phe Asp Cys Pro Asn Arg
      35      40      45
Asp Gly Thr Val Ala His Gly Gly Cys Thr Phe Cys Ser Ala Ala Gly
50      55      60
Ser Gly Asp Phe Ala Gly Asn Arg Ala Glu Pro Ile Glu Val Gln Phe
65      70      75      80
Lys Lys Ile Lys Glu Arg Met His Glu Lys Trp Ser Glu Gly Gln Tyr
      85      90      95
Ile Ala Tyr Phe Gln Ala Phe Thr Asn Thr His Ala Pro Val Glu Val
      100      105      110
Leu Lys Glu Lys Tyr Glu Pro Val Leu Lys Glu Asp Gly Val Val Gly
115      120      125

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Leu Ser Ile Ala Thr Arg Pro Asp Cys Leu Pro Asp Asp Val Val Glu
 130 135 140
 Tyr Leu Ala Glu Leu Asn Gln Arg Thr Tyr Leu Trp Val Glu Leu Gly
 145 150 155 160
 Leu Gln Thr Val His Gln Ser Thr Ser Asp Leu Ile Asn Arg Ala His
 165 170 175
 Asp Met Gln Thr Tyr Tyr Asp Gly Val Thr Lys Leu Arg Lys His Asn
 180 185 190
 Ile Asn Val Cys Thr His Ile Ile Asn Gly Leu Pro Gly Glu Asn Tyr
 195 200 205
 Asp Met Met Met Glu Thr Ala Lys Glu Val Ala Gln Met Asp Val Gln
 210 215 220
 Gly Ile Lys Ile His Leu Leu His Leu Leu Lys Gly Thr Pro Met Val
 225 230 235 240
 Lys Gln Tyr Glu Lys Gly Met Leu Glu Phe Met Ser Gln Gln Asp Tyr
 245 250 255
 Thr Asn Leu Val Cys Asp Gln Leu Glu Val Leu Pro Pro Glu Met Ile
 260 265 270
 Val His Arg Ile Thr Gly Asp Gly Pro Ile Asp Leu Met Val Gly Pro
 275 280 285
 Met Trp Ser Val Asn Lys Trp Glu Val Leu Asn Glu Ile Asp Asn Glu
 290 295 300
 Leu Ala Arg Arg Asn Ser Tyr Gln Gly Lys Met Asn Lys Gln Ser Ile
 305 310 315 320
 Gln Ser

<210> 6038

<211> 471

<212> PRT

<213> S.epidermidis

<400> 6038

Ser Arg Met Trp Lys Glu Lys Val Leu Glu Tyr Glu Asn Gln Met Ile
 1 5 10 15
 Glu Asp Leu Lys Gly Leu Leu Ser Ile Glu Ser Ile Arg Asp Asp Ser
 20 25 30
 Lys Ala Thr Ala Asp Ala Pro Val Gly Pro Gly Pro Arg Glu Ala Leu
 35 40 45
 Asp Tyr Met Tyr Asn Leu Gly Lys Arg Asp Gly Phe Ser Thr His Asp
 50 55 60
 Val Asp His Ile Ala Gly Arg Ile Glu Ala Gly Lys Gly Glu Asp Val
 65 70 75 80
 Leu Gly Ile Leu Cys His Val Asp Val Val Pro Ala Gly Asp Gly Trp
 85 90 95
 Asp Ser Asn Pro Phe Gln Pro Val Val Thr Asp Asn Ala Ile Ile Ala
 100 105 110
 Arg Gly Thr Leu Asp Asp Lys Gly Pro Thr Ile Ala Ala Tyr Tyr Ala
 115 120 125
 Val Lys Ile Leu Asn Glu Met Lys Val Asp Trp Lys Lys Arg Ile His
 130 135 140
 Ile Ile Ile Gly Thr Asp Glu Glu Ser Asp Trp Lys Cys Thr Asp Arg
 145 150 155 160
 Tyr Phe Lys Thr Glu Glu Met Pro Thr Leu Gly Phe Ala Pro Asp Ala
 165 170 175
 Glu Phe Pro Ala Ile His Gly Glu Lys Gly Ile Thr Thr Phe Asp Leu

Val	Gln	Asn	Glu	Val	Thr	Glu	Asp	Thr	Asp	Glu	Pro	Asp	Tyr	Glu	Leu
		195					200					205			
Leu	Lys	Phe	Glu	Ser	Gly	Gln	Arg	Tyr	Asn	Met	Val	Pro	Asp	Tyr	Ala
	210					215					220				
Lys	Ala	Glu	Val	Leu	Val	Lys	Glu	Asn	Met	Thr	Asp	Val	Ile	Gln	Asn
225					230					235				240	
Phe	Glu	Asn	Phe	Leu	Gln	Gln	Asn	Gln	Leu	Gln	Gly	Glu	Ser	Thr	Val
			245						250					255	
Asp	Ser	Gly	Ile	Leu	Ile	Leu	Thr	Ile	Glu	Gly	Lys	Ala	Val	His	Gly
		260						265					270		
Met	Asp	Pro	Ser	Leu	Gly	Val	Asn	Ala	Gly	Leu	Phe	Leu	Leu	Lys	Phe
		275					280					285			
Leu	Ala	Ser	Leu	Asn	Leu	Asn	Lys	Ser	Ala	Lys	Asp	Phe	Val	Glu	Phe
	290					295					300				
Asn	Glu	Arg	Tyr	Leu	Phe	Glu	Ser	His	Phe	Gly	Glu	Lys	Met	Gly	Met
305					310					315				320	
Lys	Phe	His	Thr	Asp	Ile	Met	Gly	Asp	Val	Thr	Thr	Asn	Ile	Gly	Val
			325					330						335	
Ile	Ser	Tyr	Asp	Lys	Glu	Lys	Ala	Gly	Ser	Tyr	Gly	Ile	Asn	Leu	Arg
			340					345					350		
Tyr	Pro	Glu	Gly	Phe	Lys	Phe	Glu	Asp	Ala	Ile	Asp	Arg	Phe	Arg	Ser
		355					360					365			
Glu	Ile	Asn	Glu	Leu	Gly	Phe	Asn	Leu	Glu	Leu	Gly	Lys	Val	Gln	Lys
	370				375						380				
Pro	His	Tyr	Val	Asp	Lys	Asn	Asp	Pro	Phe	Val	Lys	Thr	Leu	Val	Asn
385					390					395				400	
Ala	Tyr	Arg	Asn	Gln	Thr	Gly	Asp	Met	Thr	Glu	Pro	Tyr	Thr	Ile	Gly
			405						410					415	
Gly	Gly	Thr	Tyr	Ala	Arg	Asn	Leu	Asp	Lys	Gly	Val	Ala	Phe	Gly	Ala
			420					425					430		
Met	Phe	Ala	Asp	Ser	Glu	Asp	Leu	Met	His	Gln	Lys	Asn	Glu	Tyr	Ile
		435					440					445			
Thr	Lys	Lys	Gln	Leu	Ile	Asn	Ala	Thr	Ser	Ile	Tyr	Leu	Glu	Ala	Ile
	450					455					460				
Tyr	Ala	Leu	Cys	Val	Glu	Asp									
465					470										

<210> 6039

<211> 66

<212> PRT

<213> S.epidermidis

<400> 6039

Gly	Ile	Phe	Arg	Ala	Ile	Ala	Ser	Asn	Ile	Ala	Thr	Glu	Cys	Ser	Val
1				5					10					15	
Ala	Glu	Ile	Val	Leu	Pro	Ser	Gly	Ala	Leu	Ile	Thr	Lys	Ile	Pro	Phe
			20					25					30		
Lys	Val	Ala	Ala	Ser	Ile	Leu	Ile	Leu	Ser	Thr	Pro	Thr	Pro	Ala	Leu
		35					40					45			
Ala	Met	Thr	Phe	Lys	Phe	Val	Ala	Ala	Leu	Ile	Ile	Arg	Ser	Val	Thr
	50					55					60				
Trp	Val														
65															

<210> 6040

<211> 62
 <212> PRT
 <213> S.epidermidis

<400> 6040
 Ser Ile Leu Leu Phe Glu Lys Ile Pro Leu Leu His Glu Glu Ala Ala
 1 5 10 15
 Ala Val Lys Thr Thr Lys Leu Ile Ile Pro Ala Ala Asn Gly Ile Pro
 20 25 30
 Ile Asn Ala Asn Asn Leu Thr Asn Gly Leu Leu Ser Gly Ser Thr Leu
 35 40 45
 Ser His Gly Ile Met Asp Met Met Thr Ala Asn Ala Pro Thr
 50 55 60

<210> 6041
 <211> 67
 <212> PRT
 <213> S.epidermidis

<400> 6041
 Pro Glu Gly Arg Trp Phe Lys Ser Ala Ser Arg Asn Thr Cys Phe Ile
 1 5 10 15
 Arg Ser Arg Ser Val Ala Val Asn Thr Pro Ala Cys His Ala Gly Asp
 20 25 30
 Arg Gly Phe Asp Ser Arg Arg Asp Arg His Tyr Asn Tyr Gly Ser Val
 35 40 45
 Ala Gln Leu Val Glu Gln Trp Ile Glu Ala Pro Cys Val Gly Ser Ser
 50 55 60
 Thr Leu Ser
 65

<210> 6042
 <211> 74
 <212> PRT
 <213> S.epidermidis

<400> 6042
 Ile Gly Met Leu Leu Tyr Asn Tyr Val Pro Gln Asn Lys Trp Ser Gln
 1 5 10 15
 Trp Phe Lys Thr Tyr Gly Val Glu Glu Ser Val Asn Leu Asn Lys Arg
 20 25 30
 Met Lys Trp Tyr Thr Val Ile Gln Ala Ile Gly Leu Ile Gln Trp Tyr
 35 40 45
 Glu Glu Gln Lys Arg Tyr Arg Asp Met Asn Thr Trp Leu Lys Phe Leu
 50 55 60
 Asn Glu Val Met Asn Ser Asn Leu Phe Ile
 65 70

<210> 6043
 <211> 323
 <212> PRT
 <213> S.epidermidis

<400> 6043
 Ile Ile Phe Arg Ser Leu Lys Gly Val Ile Asn Met Glu Val Lys Met
 1 5 10 15

Asn Glu Ile Met Glu Ala Leu Glu Gln Ser Glu Leu Ile Ile Ile His
 20 25 30
 Arg His Leu Arg Pro Asp Pro Asp Ala Tyr Gly Ser Gln Leu Gly Leu
 35 40 45
 Lys Tyr Tyr Leu Gln Lys Lys Phe Pro Asn Lys Gln Ile Tyr Ala Val
 50 55 60
 Gly Ala Asn Glu Asp Ser Leu Lys Phe Ile Gly Leu Met Asp Glu Ile
 65 70 75 80
 Asp Asp Asp Met Tyr Lys Lys Ala Thr Val Val Val Cys Asp Thr Ala
 85 90 95
 Asn Ala Pro Arg Ile Asp Asp Gln Arg Tyr Asp Thr Gly Thr Lys Leu
 100 105 110
 Leu Lys Ile Asp His His Pro Ala Thr Asp Gln Tyr Gly Asp Ile Asn
 115 120 125
 Tyr Val Asn Thr Lys Ala Ser Ser Thr Ser Glu Ile Ile Tyr Glu Phe
 130 135 140
 Ile Leu His Phe Asn Asp Glu His Ile Ile Asp Glu Gln Val Ala Arg
 145 150 155 160
 Val Leu Tyr Leu Gly Ile Val Gly Asp Thr Gly Arg Phe Leu Phe Asn
 165 170 175
 Asn Thr Thr Pro Arg Thr Met Gln Ile Thr Gly Lys Leu Leu Thr Tyr
 180 185 190
 Pro Phe Asp His Asn Gln Glu Leu Asn Lys Met Ser Glu Lys Asp Pro
 195 200 205
 Lys Leu Leu Pro Phe Gln Gly Tyr Ile Leu Gln Asn Phe Asp Leu Asn
 210 215 220
 Asp Lys Gly Phe Cys Lys Val Lys Ile Thr Lys Asp Ile Leu Glu Lys
 225 230 235 240
 Phe Gln Ile Gln Pro Asn Glu Ala Ser Leu Phe Val Asn Thr Ile Ala
 245 250 255
 Asp Ile Arg Gly Leu Lys Ile Trp Met Phe Gly Val Asp Glu Gly Asp
 260 265 270
 Gln Ile Arg Cys Arg Leu Arg Ser Lys Gly His Ile Ile Ile Asn Asp
 275 280 285
 Val Ala Asn Thr Phe Gly Gly Gly Gly His Pro Asn Ala Ser Gly Val
 290 295 300
 Ser Val Asn Ser Trp Glu Gln Phe Glu Gln Leu Ala Glu Ala Leu Asn
 305 310 315 320
 Asp Lys Leu

<210> 6044

<211> 109

<212> PRT

<213> S.epidermidis

<400> 6044

Cys Leu Ser Arg Arg Gln Phe Met Ala Arg Ser Lys Lys Tyr Phe Tyr
 1 5 10 15
 Leu Ser Leu Leu Met Ile Ile Leu Ser Phe Phe Phe Asn Thr Asn Asn
 20 25 30
 Ser Leu Leu Ser Asn Ile Phe Gln Ser Phe Met Lys Ile Val Val Val
 35 40 45
 Thr Ser Ile Val Asn Ile Ile Ile Leu Ile Leu Ser Ile Val Phe Ala
 50 55 60
 Asp Lys Ser Ile Lys Tyr Ala Lys Glu Ser Ser Asp Trp Ile Arg Phe

CCCTTGGGGGG

<400> 6047																
Lys	Thr	Tyr	Ser	Arg	Lys	Ala	Asn	Glu	Ile	Ile	Leu	Ala	Thr	Arg	Val	
1				5					10					15		
Glu	Asn	Leu	Leu	Ser	Lys	Asp	Glu	Ile	Ile	Tyr	Thr	Tyr	Leu	Asn	Ile	
			20					25					30			
Val	Pro	Phe	Gly	His	Asp	Tyr	Asn	Gly	Ala	Asn	Ile	Thr	Gly	Ile	Ser	
		35					40					45				
Ser	Ala	Ser	Tyr	Ser	Leu	Phe	Gly	Ile	Pro	Ala	Lys	Asp	Leu	Asn	Ile	
	50					55					60					
Ala	Gln	Ser	Ala	Tyr	Leu	Ile	Gly	Leu	Leu	Gln	Ser	Pro	Tyr	Gly	Tyr	
65					70					75					80	
Thr	Pro	Tyr	Asp	Glu	His	Gly	Lys	Val	Lys	Pro	Tyr	His	Leu	Leu	Lys	
				85					90					95		
Leu	Ser	Met	Lys	Arg	Gln	Gln	Tyr	Val	Leu	Lys	Arg	Met	Arg	Val	Glu	
			100					105					110			
Gly	Lys	Ile	Ser	Lys	Gln	Gln	Tyr	Glu	Asn	Ala	Lys	Lys	Tyr	Asn	Ile	
		115					120					125				

Lys Gln His Leu Leu Lys Gln Ser Lys Asp Glu
130 135

<210> 6048

<211> 461

<212> PRT

<213> S.epidermidis

<400> 6048

Met	Ser	Val	Arg	Ile	Glu	His	Asp	Thr	Phe	Gly	Glu	Ile	Glu	Val	Pro
1				5					10					15	
Glu	Asp	Lys	Tyr	Trp	Gly	Ala	Gln	Thr	Glu	Arg	Ser	Lys	Arg	Asn	Phe
			20					25					30		
Pro	Val	Gly	Lys	Glu	His	Met	Pro	Ile	Gln	Val	Ile	Tyr	Gly	Phe	Ala
		35					40					45			
Gln	Leu	Lys	Arg	Gly	Ala	Ala	Leu	Ala	Asn	His	Glu	Leu	Gly	Lys	Leu
	50					55					60				
Ser	Asp	Glu	Lys	Lys	Asn	Ala	Ile	Val	Tyr	Ala	Cys	Asp	Arg	Ile	Leu
65					70				75					80	
Asn	Gly	Glu	Leu	Asp	Asn	His	Phe	Pro	Leu	Val	Ile	Trp	Gln	Thr	Gly
				85				90					95		
Ser	Gly	Thr	Gln	Ser	Asn	Met	Asn	Val	Asn	Glu	Val	Val	Ser	Tyr	Val
			100				105						110		
Ala	Asn	Glu	Tyr	Leu	Lys	Lys	His	Gly	Ser	Lys	Glu	Thr	Ile	His	Pro
		115					120					125			
Asn	Asp	Asp	Val	Asn	Lys	Ser	Gln	Ser	Ser	Asn	Asp	Thr	Phe	Pro	Thr
	130					135					140				
Ala	Met	His	Val	Ala	Leu	Phe	His	Glu	Val	Glu	Thr	Lys	Leu	Glu	Pro
145					150					155				160	
Ala	Leu	Asn	His	Leu	Arg	Gln	Thr	Phe	Lys	Glu	Lys	Glu	Asp	Gln	Tyr
				165				170						175	
Gln	Ser	Ile	Ile	Lys	Ile	Gly	Arg	Thr	His	Leu	Gln	Asp	Ala	Thr	Pro
			180				185						190		
Ile	Lys	Leu	Gly	Gln	Glu	Ile	Ser	Gly	Trp	Arg	Tyr	Met	Leu	Glu	Lys
		195					200					205			
Cys	Glu	Gln	Leu	Leu	Ser	Glu	Ser	Lys	Lys	His	Ile	Leu	Asn	Leu	Ala
	210					215					220				
Ile	Gly	Gly	Thr	Ala	Val	Gly	Thr	Gly	Ile	Asn	Ala	His	Pro	Glu	Phe
225					230				235					240	
Gly	His	Lys	Val	Ala	Lys	Tyr	Ile	Ser	Gln	Asn	Thr	Gly	Tyr	Ala	Phe
				245				250						255	
Val	Ser	Ser	Glu	Asn	Lys	Phe	His	Ala	Leu	Thr	Ser	His	Asp	Glu	Ile
			260				265						270		
Val	Gln	Leu	His	Gly	Thr	Leu	Lys	Ala	Leu	Ala	Thr	Asp	Leu	Met	Lys
		275					280					285			
Ile	Ala	Asn	Asp	Ile	Arg	Trp	Leu	Ala	Ser	Gly	Pro	Arg	Ala	Gly	Leu
	290					295					300				
Ala	Glu	Ile	Ser	Ile	Pro	Glu	Asn	Glu	Pro	Gly	Ser	Ser	Ile	Met	Pro
305					310				315					320	
Gly	Lys	Val	Asn	Pro	Thr	Gln	Cys	Glu	Met	Leu	Thr	Met	Val	Ala	Val
				325				330						335	
Gln	Val	Met	Gly	Asn	Asp	Thr	Thr	Val	Gly	Ile	Ala	Ser	Ser	Gln	Gly
			340				345						350		
Asn	Phe	Glu	Leu	Asn	Val	Phe	Lys	Pro	Val	Ile	Met	His	Asn	Thr	Leu
		355				360						365			
Gln	Ser	Ile	Tyr	Leu	Leu	Ala	Asp	Gly	Met	Asn	Thr	Phe	Asn	Lys	Asn

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      370                      375                      380
Cys Ala Ile Gly Ile Gln Pro Ile Glu Glu Asn Ile Asn Asn Tyr Leu
385                      390                      395                      400
Asn Gln Ser Leu Met Leu Val Thr Ala Leu Asn Pro His Ile Gly Tyr
      405                      410                      415
Glu Lys Ala Ala Gln Ile Ala Lys Lys Ala His Lys Glu Gly Leu Thr
      420                      425                      430
Leu Lys Glu Ser Ala Ile Glu Ser Gly Tyr Val Thr Glu Ser Gln Phe
      435                      440                      445
Glu Glu Trp Ile Lys Pro Glu Asp Met Val Asp Pro His
      450                      455                      460

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<210> 6049

<211> 68

<212> PRT

<213> S.epidermidis

<400> 6049

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Asn Leu Val Arg Lys Ser Leu Leu Gln Lys Val Gly Ala Val Met Pro
1                      5                      10                      15
Ser Gly Met Val Ile Lys Asp Ala Gln Leu Arg Gly Val Asp Ser Ser
      20                      25                      30
Gly Met Ile Cys Ser Met Lys Glu Leu Asn Leu Pro Asn Ala Pro Lys
      35                      40                      45
Glu Lys Arg Asn Tyr Gly Thr Leu Thr Met Thr Met Ile Leu Gly Gln
      50                      55                      60
Ala Ile Phe Glu
65

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<210> 6050

<211> 209

<212> PRT

<213> S.epidermidis

<400> 6050

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Asn Ile Trp Leu Thr Lys Asn Tyr Phe Leu Ser His Phe Leu Val Glu
1                      5                      10                      15
Ser Glu Val Asn Val Leu Glu Gln Phe Tyr Gln Leu Gly Trp Thr Leu
      20                      25                      30
Asp Ser Ala Gly Gly Ala Ser Gly Glu Ala Tyr Met Ala Glu Gln Asp
      35                      40                      45
Gly Gln Lys Leu Phe Leu Lys Arg Asn Ser Asn Pro Phe Ile Ala Ala
      50                      55                      60
Leu Ser Ala Glu Gly Ile Val Pro Lys Leu Val Trp Thr Lys Arg Ile
65                      70                      75                      80
Glu Thr Gly Glu Val Val Thr Ala Gln His Trp Lys Asn Gly Arg Glu
      85                      90                      95
Leu Asn Glu Asp Glu Met Asn Gln Thr Arg Val Ala Glu Leu Leu His
      100                      105                      110
Lys Ile His Gly Ser Arg Pro Leu Leu Thr Met Leu Lys Arg Met Glu
      115                      120                      125
Met Glu Pro Ile Thr Pro Asp Ile Met Leu Asn Lys Ile Asn Ala Ser
      130                      135                      140
Leu Ser Arg Glu Val Leu Thr His His Val Val Arg Arg Ala Leu Thr
145                      150                      155                      160
Tyr Leu Glu Asp His Leu Pro Asn Leu Glu Pro Arg Phe Phe Thr Val

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2633

				165					170					175			
Val	His	Gly	Arg	Val	Lys	His	Asn	Asn	Trp	Leu	Leu	Ser	Glu	Ser	Asp		
			180					185					190				
Glu	Leu	Tyr	Leu	Val	Asp	Trp	Gly	Arg	Cys	Met	Ile	Ala	Lys	Pro	Ala		
		195					200					205					

Asn

<210> 6051
 <211> 42
 <212> PRT
 <213> S.epidermidis

Lys	Arg	Asn	Ser	Ser	Lys	Thr	Leu	Ser	Phe	Cys	Phe	Phe	Ser	Val	Met		
1				5					10					15			
Arg	Leu	Tyr	Tyr	Asn	Tyr	Asn	Ser	Phe	Gly	Asn	Phe	His	Ser	Lys	Tyr		
			20					25					30				
Gly	Gly	Cys	Arg	Phe	Leu	Ile	Gln	Gln	Thr								
		35					40										

<210> 6052
 <211> 77
 <212> PRT
 <213> S.epidermidis

Asn	Ile	Cys	Ser	Ile	Phe	Cys	Tyr	Phe	Phe	Thr	Ile	Ile	Lys	Tyr	Phe		
1				5				10						15			
Lys	Ile	His	Cys	His	Val	Asn	Tyr	Thr	Pro	Leu	Ser	Leu	Leu	Phe	Tyr		
			20					25					30				
Leu	Ser	Arg	Phe	Asn	Leu	Lys	Tyr	Thr	Leu	Cys	Ile	Asn	Tyr	Gln	Thr		
		35					40					45					
Ile	Ile	Phe	Tyr	Trp	Leu	Thr	Ile	Asn	Ile	Thr	Phe	Leu	Gly	Phe	Ile		
	50					55					60						
Leu	His	Leu	Leu	Tyr	Leu	Leu	Ala	Leu	Ile	Met	Lys	Gly					
65					70				75								

<210> 6053
 <211> 409
 <212> PRT
 <213> S.epidermidis

Met	Ser	Leu	Arg	Asp	Asp	Ala	Leu	Glu	Met	His	Arg	Glu	Asn	Gln	Gly		
1				5				10						15			
Lys	Leu	Glu	Ile	Thr	Pro	Asn	Val	Lys	Val	Thr	Asn	Lys	Gln	Gln	Leu		
			20					25					30				
Ser	Leu	Ala	Tyr	Ser	Pro	Gly	Val	Ala	Glu	Pro	Cys	Lys	Glu	Ile	His		
		35					40					45					
Glu	Asp	Ser	Arg	Lys	Val	Tyr	Glu	Tyr	Thr	Ile	Lys	Gly	Asn	Thr	Val		
	50					55					60						
Ala	Val	Val	Thr	Asp	Gly	Thr	Ala	Val	Leu	Gly	Leu	Gly	Asn	Ile	Gly		
65					70				75					80			
Ala	Glu	Ala	Ser	Ile	Pro	Val	Met	Glu	Gly	Lys	Ala	Ala	Leu	Phe	Lys		
				85					90					95			

6051-6053: S.epidermidis

Ser Phe Ala Gly Ile Asn Gly Val Pro Ile Ser Leu Asp Thr Thr Asp
 100 105 110
 Thr Gln Glu Ile Ile Lys Thr Val Lys Leu Ile Ala Pro Asn Tyr Gly
 115 120 125
 Gly Ile Asn Leu Glu Asp Ile Ser Ala Pro Arg Cys Phe Glu Ile Glu
 130 135 140
 Glu Thr Leu Lys Lys Glu Thr Asn Ile Pro Ile Phe His Asp Asp Gln
 145 150 155 160
 His Gly Thr Ala Ile Val Thr Met Ala Gly Leu Ile Asn Ala Leu Lys
 165 170 175
 Ile Val Asp Lys Glu Leu Thr Asn Ile Lys Val Val Leu Asn Gly Ala
 180 185 190
 Gly Ala Ala Gly Ile Ala Ile Val Lys Leu Leu His Ala Tyr Gly Val
 195 200 205
 Asn Asn Met Ile Met Cys Asp Ser Lys Gly Ala Ile Tyr Ser Gly Arg
 210 215 220
 Asn Phe Gly Met Asn Asp Thr Lys Thr Tyr Val Ala Lys Trp Thr Asn
 225 230 235 240
 Lys Asp Lys Val Glu Gly Ser Leu Glu Glu Val Ile Lys Asp Ala Asp
 245 250 255
 Val Phe Ile Gly Val Ser Val Ala Asp Ile Leu Thr Gln Asp Met Val
 260 265 270
 Lys Thr Met Ala Asp Asp Pro Ile Ile Phe Ala Met Ala Asn Pro Asn
 275 280 285
 Pro Glu Ile Asn Pro Asn Glu Ala Lys Gln Ala Gly Ala Lys Val Val
 290 295 300
 Gly Thr Gly Arg Ser Asp Phe Pro Asn Gln Ile Asn Asn Val Leu Ala
 305 310 315 320
 Phe Pro Gly Leu Phe Arg Gly Ala Leu Asp Val Glu Ala Thr His Ile
 325 330 335
 Asn Glu Asp Met Lys Lys Ala Ala Val Glu Ala Ile Val His Leu Ile
 340 345 350
 Asp Glu Asn Glu Leu His Pro Asp Tyr Cys Ile Pro Gly Pro Phe Asp
 355 360 365
 Lys Arg Val Ala Pro Ser Val Ala Lys Asn Val Ala Lys Ala Ala Met
 370 375 380
 Glu Ser Gly Val Ala Arg Ile Lys Ile Asp Thr Gln Glu Ile Phe Asp
 385 390 395 400
 Lys Thr Met Lys Leu Thr Asp Leu Lys
 405

<210> 6054

<211> 601

<212> PRT

<213> S.epidermidis

<400> 6054

Ile Ser Lys Arg Ile Ile Asn Leu Asn Leu Phe Gly Arg Ile Ile Lys
 1 5 10 15
 Met Arg Lys Thr Lys Ile Val Cys Thr Ile Gly Pro Ala Ser Glu Ser
 20 25 30
 Glu Glu Met Leu Glu Lys Leu Met Asn Ala Gly Met Asn Val Ala Arg
 35 40 45
 Leu Asn Phe Ser His Gly Ser His Glu Glu His Lys Ala Arg Ile Asp
 50 55 60
 Thr Ile Arg Lys Val Ala Lys Arg Leu Asn Lys Thr Ile Gly Leu Leu

65					70					75					80
Leu	Asp	Thr	Lys	Gly	Pro	Glu	Ile	Arg	Thr	His	Asn	Met	Lys	Asp	Gly
				85					90					95	
Leu	Ile	Val	Leu	Glu	Lys	Gly	Lys	Glu	Val	Ile	Val	Ser	Met	Asn	Glu
			100					105					110		
Val	Glu	Gly	Thr	Pro	Glu	Lys	Phe	Ser	Val	Thr	Tyr	Glu	Asn	Leu	Ile
		115					120					125			
Asn	Asp	Val	Asn	Ile	Gly	Ser	Tyr	Ile	Leu	Leu	Asp	Asp	Gly	Leu	Val
	130					135					140				
Glu	Leu	Gln	Val	Lys	Glu	Ile	Asn	Lys	Asp	Lys	Gly	Glu	Val	Lys	Cys
145				150						155					160
Asp	Ile	Leu	Asn	Thr	Gly	Glu	Leu	Lys	Asn	Lys	Lys	Gly	Val	Asn	Leu
			165						170					175	
Pro	Gly	Val	Lys	Val	Asn	Leu	Pro	Gly	Ile	Thr	Asp	Lys	Asp	Ala	Asp
			180					185					190		
Asp	Ile	Arg	Phe	Gly	Ile	Lys	Glu	Asn	Val	Asp	Phe	Ile	Ala	Ala	Ser
		195					200					205			
Phe	Val	Arg	Arg	Pro	Ser	Asp	Val	Leu	Asp	Ile	Arg	Gln	Ile	Leu	Glu
	210					215					220				
Glu	Glu	Lys	Ala	Glu	Ile	Thr	Ile	Phe	Pro	Lys	Ile	Glu	Asn	Gln	Glu
225				230						235					240
Gly	Ile	Asp	Asn	Ile	Glu	Glu	Ile	Leu	Glu	Val	Ser	Asp	Gly	Leu	Met
			245						250					255	
Val	Ala	Arg	Gly	Asp	Met	Gly	Val	Glu	Ile	Pro	Pro	Glu	Ser	Val	Pro
			260					265					270		
Met	Val	Gln	Lys	Asp	Leu	Ile	Arg	Lys	Cys	Asn	Lys	Leu	Gly	Lys	Pro
	275						280					285			
Val	Ile	Thr	Ala	Thr	Gln	Met	Leu	Asp	Ser	Met	Gln	Arg	Asn	Pro	Arg
	290					295					300				
Ala	Thr	Arg	Ala	Glu	Ala	Ser	Asp	Val	Ala	Asn	Ala	Ile	Tyr	Asp	Gly
305				310						315					320
Thr	Asp	Ala	Val	Met	Leu	Ser	Gly	Glu	Thr	Ala	Ala	Gly	Gln	Tyr	Pro
			325					330						335	
Glu	Glu	Ala	Val	Lys	Thr	Met	Arg	Asn	Ile	Ala	Val	Ser	Ala	Glu	Ala
		340						345					350		
Ala	Gln	Asp	Tyr	Lys	Lys	Leu	Leu	Ser	Asp	Arg	Thr	Lys	Leu	Val	Glu
	355					360						365			
Thr	Ser	Leu	Val	Asn	Ala	Ile	Gly	Val	Ser	Val	Ala	His	Thr	Ala	Leu
	370					375					380				
Asn	Leu	Asn	Val	Lys	Ala	Ile	Val	Ala	Ala	Thr	Glu	Ser	Gly	Ser	Thr
385				390						395					400
Ala	Arg	Thr	Ile	Ser	Lys	Tyr	Arg	Pro	His	Ser	Asp	Ile	Ile	Ala	Val
			405						410					415	
Thr	Pro	Ser	Glu	Lys	Thr	Ala	Arg	Gln	Cys	Ala	Ile	Val	Trp	Gly	Val
		420						425					430		
Asn	Pro	Val	Lys	Glu	Gly	Arg	Lys	Thr	Thr	Asp	Ala	Leu	Leu	Asn	
	435					440					445				
Asn	Ala	Val	Ala	Thr	Ala	Val	Glu	Thr	Gly	Arg	Val	Ser	Asn	Gly	Asp
	450					455					460				
Leu	Ile	Ile	Ile	Thr	Ala	Gly	Val	Pro	Thr	Gly	Glu	Lys	Gly	Thr	Thr
465				470						475					480
Asn	Met	Met	Lys	Ile	His	Leu	Val	Gly	Asp	Glu	Ile	Ala	Lys	Gly	Gln
			485					490						495	
Gly	Val	Gly	Arg	Gly	Ser	Val	Val	Gly	His	Ala	Ile	Val	Ala	Asp	Ser
		500						505					510		
Ala	Ser	Asp	Leu	Glu	Gly	Lys	Asp	Leu	Ser	Asp	Lys	Val	Ile	Ile	Thr

515 520 525
 Asn Ser Val Asp Glu Thr Leu Val Pro Tyr Val Glu Lys Ala Ile Gly
 530 535 540
 Leu Ile Thr Glu Glu Asn Gly Ile Thr Ser Pro Ser Ala Ile Ile Gly
 545 550 555 560
 Leu Glu Lys Gly Ile Pro Thr Val Val Gly Val Glu Gln Ala Thr Lys
 565 570 575
 Glu Ile Lys Asn Asp Met Leu Val Thr Leu Asp Ala Ser Gln Gly Lys
 580 585 590
 Val Phe Glu Gly Tyr Ala Asn Val Leu
 595 600

<210> 6055
 <211> 71
 <212> PRT
 <213> S.epidermidis

<400> 6055
 Val Leu Lys Ser Glu Arg Leu Asn Ala Pro Ile Leu Pro Ile Lys Lys
 1 5 10 15
 Ala Pro Asn Lys Phe Ala Thr Asn Val Pro Asn Gly Met Val Glu Pro
 20 25 30
 Ser Leu Ser Ile Asp Lys Gln Asn Leu Ile Asn Ala Pro Lys Ala Pro
 35 40 45
 Pro Thr Lys Ile Tyr Arg Tyr Cys Ile Tyr Ile Ser Pro Gln Asn Ile
 50 55 60
 Lys Glu Leu Ile Ile Ile Ile
 65 70

<210> 6056
 <211> 307
 <212> PRT
 <213> S.epidermidis

<400> 6056
 Leu Met Lys Ser Phe Arg Asn Ile Met Gly Asp Ser Gln Asn Leu Asp
 1 5 10 15
 Lys Arg Ile Gln Lys Ile Lys Gln Asn Val Ile Asn Asp Thr Asp Val
 20 25 30
 Lys His Phe Leu Glu Lys Asn Arg Ser Asn Ile Thr Asn Glu Met Ile
 35 40 45
 Asp Glu Asp Leu Asn Val Leu Gln Glu Tyr Lys Asp Gln Gln Lys Val
 50 55 60
 Tyr Asp Gly His Arg Tyr Asp Asp Cys Pro Asn Phe Val Lys Gly His
 65 70 75 80
 Val Pro Glu Leu Tyr Ile Glu Asn Glu Arg Ile Lys Ile Arg Tyr Leu
 85 90 95
 Pro Cys Pro Cys Lys Ile Lys His Asp Glu Glu Arg Phe Asp Ser Gln
 100 105 110
 Leu Ile Thr Ser His His Met Gln Arg Asp Thr Leu His Ala Lys Leu
 115 120 125
 Lys Asp Ile Tyr Met Asn Asn Arg Glu Arg Leu Asp Val Ala Met Ala
 130 135 140
 Ala Asp Gln Ile Cys Thr Ala Ile Thr Asn Asp Glu Lys Val Lys Gly
 145 150 155 160
 Leu Tyr Leu Tyr Gly Pro Phe Gly Thr Gly Lys Ser Phe Ile Leu Gly

				165					170					175			
Ala	Ile	Ala	Asn	Gln	Leu	Lys	Ser	Gln	Lys	Ile	Ser	Ser	Thr	Ile	Val		
			180					185					190				
Tyr	Leu	Pro	Glu	Phe	Ile	Arg	Thr	Leu	Lys	Gly	Gly	Phe	Lys	Asp	Gly		
		195					200					205					
Ser	Phe	Glu	Lys	Lys	Leu	Gln	Arg	Val	Arg	Glu	Ala	Asn	Ile	Leu	Met		
	210					215					220						
Leu	Asp	Asp	Ile	Gly	Ala	Glu	Glu	Val	Thr	Pro	Trp	Val	Arg	Asp	Glu		
225					230					235					240		
Val	Ile	Gly	Pro	Leu	Leu	His	Tyr	Arg	Met	Val	His	Glu	Leu	Pro	Thr		
			245					250						255			
Phe	Phe	Ser	Ser	Asn	Phe	Asn	Tyr	Ser	Glu	Leu	Glu	His	His	Leu	Ser		
			260					265					270				
Ile	Thr	Arg	Asp	Gly	Thr	Glu	Lys	Thr	Lys	Ala	Ala	Arg	Ile	Ile	Glu		
		275					280					285					
Arg	Ile	Lys	Thr	Leu	Ser	Thr	Pro	Tyr	Tyr	Leu	Thr	Gly	Lys	Asn	Phe		
	290					295					300						
Arg	Asn	Asn															
305																	

<210> 6057

<211> 338

<212> PRT

<213> S.epidermidis

<400> 6057

Met	Arg	Glu	Arg	Ile	Met	Lys	Val	Lys	Ala	Ile	Asn	Leu	Tyr	Thr	Tyr		
1				5					10					15			
Lys	Glu	Pro	Phe	Lys	Ser	Pro	Ile	Ser	Thr	Pro	Lys	Val	Lys	Leu	Thr		
			20					25				30					
His	Arg	Glu	Ser	Leu	Phe	Thr	Glu	Ile	Val	Thr	Tyr	Ser	Gly	Glu	Thr		
		35				40					45						
Tyr	Tyr	Gly	Glu	Cys	Asn	Ala	Phe	Leu	Thr	Asn	Trp	Tyr	Asp	Lys	Glu		
	50				55					60							
Thr	Ile	Leu	Thr	Val	Val	Asn	Arg	Leu	Arg	Gln	Trp	Ile	Pro	Gln	Val		
65				70					75					80			
Leu	His	Lys	Asp	Met	Thr	Ser	Phe	Asp	Ser	Trp	Leu	Pro	Tyr	Leu	Asn		
			85					90				95					
Gln	Met	Asn	Asp	Val	Pro	Ala	Ala	Arg	Ser	Met	Val	Val	Met	Ala	Val		
		100				105					110						
Tyr	Gln	Met	Tyr	Asn	Asp	Leu	His	Asp	Phe	Glu	Val	Gln	Tyr	Gly	Ala		
	115				120						125						
Thr	Val	Ser	Gly	Leu	Thr	Asn	Ser	Gln	Ile	Glu	Thr	Leu	Leu	Glu	Thr		
	130				135					140							
Arg	Pro	Lys	Arg	Ile	Lys	Leu	Lys	Trp	Ser	Thr	Ser	Leu	Ile	Lys	Asp		
145				150					155					160			
Leu	Glu	Thr	Ile	Arg	Leu	Leu	Asn	Phe	Asp	Cys	Asp	Ile	Ala	Ile	Asp		
			165					170				175					
Ala	Asn	Glu	Ser	Leu	Thr	Lys	Pro	Ser	Phe	Leu	Gln	Leu	Ala	Asn	Val		
		180						185				190					
Asn	Thr	Ser	Asp	Ile	Ile	Tyr	Ile	Glu	Glu	Pro	Phe	Lys	Ile	Leu	Glu		
	195				200						205						
Asp	Leu	Asn	Asp	Ile	Asp	Met	Ser	Ile	Phe	Pro	Arg	Ile	Ala	Ile	Asp		
	210				215				220								
Glu	Lys	Ala	Leu	Ser	Ile	Glu	Lys	Ile	Gln	Ser	Ile	Ile	Gln	Gln	Tyr		
225				230					235					240			

Pro Ile Gln Val Val Val Leu Lys Pro Phe Arg Leu Gly Gly Ile Asp
 245 250 255
 Arg Met Leu Asn Ala Met Lys Ile Leu Lys Glu Lys Asn Ile Arg Phe
 260 265 270
 Val Val Gly Gly Met Tyr Glu Phe Gly Leu Ser Arg Tyr Phe Thr Ala
 275 280 285
 Met Leu Ala Lys Glu Gly Ser Tyr Pro Gly Asp Ile Thr Pro His Gly
 290 295 300
 Tyr Tyr Phe Ser Asn Asp Ile Val Glu Thr Ser Gly Ile Leu Lys Gly
 305 310 315 320
 Gly Met Ile Tyr Phe Thr Pro Pro Lys Val Lys Arg Ser Leu Leu Asn
 325 330 335
 Lys Val

<210> 6058

<211> 320

<212> PRT

<213> S.epidermidis

<400> 6058

Ile Thr Gly Arg Arg Glu Lys Met Arg Asn Val Glu Lys Leu Asn Pro
 1 5 10 15
 Gly Asp Ser Val Asp His Phe Phe Leu Ile His Arg Ala Thr Gln Gly
 20 25 30
 Val Thr Ala Gln Gly Lys Asp Tyr Met Thr Leu Phe Leu Gln Asp Lys
 35 40 45
 Ser Gly Asp Ile Glu Ala Lys Leu Trp Thr Ala Thr Lys Asp Asp Met
 50 55 60
 Gln Thr Leu Lys Pro Glu Thr Ile Val His Val Lys Gly Asp Ile Ile
 65 70 75 80
 Asn Tyr Arg Gly Arg Lys Gln Met Lys Ile His Gln Ile Arg Leu Ala
 85 90 95
 Gln Ala Glu Asp Lys Val Ser Thr Lys Asp Phe Val Asp Gly Ala Pro
 100 105 110
 Met Ser Pro Thr Glu Ile Gln Glu Glu Leu Ser His Phe Met Leu Asp
 115 120 125
 Ile Glu Asn Ala Asn Leu Gln Arg Ile Thr Arg His Leu Ile Lys Lys
 130 135 140
 Tyr Gln Asp Arg Phe Phe Thr Tyr Pro Ala Ala Ser Ser His His His
 145 150 155 160
 Asn Phe Ala Ser Gly Leu Ser Tyr His Val Leu Thr Met Leu Arg Ile
 165 170 175
 Ala Lys Ser Val Cys Asp Ile Tyr Pro Leu Leu Asn Arg Ser Leu Leu
 180 185 190
 Tyr Ser Ala Ile Ile Leu His Asp Leu Gly Lys Val Arg Glu Leu Ser
 195 200 205
 Gly Pro Val Ala Thr Thr Tyr Thr Val Glu Gly Asn Leu Leu Gly His
 210 215 220
 Ile Ser Ile Ala Ser Asp Glu Val Ala Glu Thr Ala Lys Glu Leu Gly
 225 230 235 240
 Ile Asp Gly Glu Glu Val Met Leu Leu Arg His Met Ile Leu Ala His
 245 250 255
 His Gly Lys Met Glu Phe Gly Ser Pro Lys Leu Pro His Leu Lys Glu
 260 265 270
 Ala Glu Ile Leu Tyr Phe Ile Asp Asn Ile Asp Ala Lys Met Asn Met

65					70					75				80	
Ala	Lys	Phe	Ile	Tyr	Tyr	Phe	Ala	Gln	Tyr	Ser	Ile	Lys	Met	Glu	His
				85					90					95	
Asp	Glu	Pro	Phe	Ile	Lys	Asp	Val	Tyr	Phe	Val	Glu	Val	Ser	His	Leu
			100					105					110		
Glu	Tyr	Val	Asp	Thr	Tyr	Tyr	Glu	Thr	Leu	Gly	Pro	Cys	Leu	Tyr	His
		115					120					125			
Gln	Ile	Asn	Asp	Ile	Pro	Leu	Asn	Lys	Arg	Ser	Phe	Leu	Ile	Asn	Asp
	130					135					140				
Lys	Ala	Ile	Leu	His	Cys	Leu	Glu	Arg	Val	Lys	Thr	Leu	Gly	Phe	Tyr
145					150					155					160

<210> 6061

<211> 153

<212> PRT

<213> S.epidermidis

<400> 6061

Leu	Asn	Trp	Arg	Ser	Ile	His	Met	Val	Arg	His	Asp	Phe	Lys	Val	Lys
1				5					10					15	
Thr	Glu	Trp	Leu	Gly	Gly	Arg	Glu	Glu	Val	Gly	Lys	Leu	Arg	Gly	Asp
			20					25					30		
Ile	Ile	Asn	Glu	Asn	Ile	Ser	Ile	Pro	Ser	Ser	Leu	Gly	Gly	Gln	Gly
		35					40					45			
Glu	Gly	Thr	Asn	Pro	Asp	Glu	Leu	Leu	Val	Ser	Ala	Ala	Ser	Ser	Cys
	50					55				60					
Tyr	Ile	Ile	Ser	Leu	Ala	Ala	Thr	Leu	Glu	Lys	Ser	Gly	Phe	Thr	Asn
65				70						75					80
Val	Lys	Ile	Asn	Gln	Ser	Ile	Gly	Thr	Ala	Ser	Phe	Glu	Asn	Lys	
			85					90					95		
Lys	Phe	Lys	Met	Glu	Arg	Ile	Thr	His	Tyr	Pro	Ser	Ile	Lys	Val	Pro
			100					105					110		
Ser	Ser	Gln	Thr	Glu	Lys	Leu	Lys	Ser	Ile	Leu	Asp	Lys	Leu	Leu	Val
		115					120					125			
Ile	Ala	Asp	Asn	Asn	Cys	Met	Ile	Ser	Asn	Ala	Ile	Arg	Asn	Asn	Val
	130					135					140				
Ile	Ile	Ser	Ile	Glu	Pro	Asn	Leu	Ile							
145						150									

<210> 6062

<211> 252

<212> PRT

<213> S.epidermidis

<400> 6062

Ser	Gln	Trp	Arg	Cys	Leu	Met	Thr	Val	Lys	Val	Glu	His	Leu	Thr	Gly
1				5					10					15	
Gly	Tyr	Gly	Lys	Lys	Pro	Val	Ile	Lys	Asp	Leu	Asn	Phe	Glu	Leu	Glu
			20					25					30		
Lys	Gly	Glu	Ile	Val	Gly	Leu	Ile	Gly	Leu	Asn	Gly	Ala	Gly	Lys	Ser
		35					40					45			
Thr	Thr	Ile	Lys	His	Met	Leu	Gly	Leu	Ile	Asn	Pro	Met	Glu	Gly	Lys
	50					55				60					
Leu	Ser	Ile	Ser	Asn	Ile	Lys	Ile	Asn	Glu	Asp	Ile	Glu	Asn	Tyr	Arg
65				70						75				80	
Arg	Lys	Leu	Ser	Tyr	Ile	Pro	Glu	Ser	Pro	Val	Ile	Tyr	Asp	Glu	Leu

<211> 199
 <212> PRT
 <213> S.epidermidis

<400> 6066

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Ser Val Phe Ile Tyr Asn Arg Ile Asn Lys Gly Val Arg Gly Lys Met
1      5      10      15
Thr Asp Ile Ile Ile Val His Ser Lys His Gly Asn Ser Lys Asn His
      20      25      30
Trp Tyr Glu Trp Leu Arg His Asn Leu Thr Leu Glu Gly Tyr Asp Val
      35      40      45
Ser Leu Phe Asn Leu Glu Ala Asn Asp His Ala Gln Ile Asp Glu Trp
      50      55      60
Val Asn Glu Met Lys Gln Gln Leu His Ile Arg Lys Lys Asp Thr Tyr
65      70      75      80
Phe Val Thr His Gly Phe Gly Ser Ile Ala Ala Leu Lys Phe Leu Glu
      85      90      95
Glu Thr His His His Ile Glu Gly Phe Phe Ser Ile Ala Gly Phe Lys
      100     105     110
Glu Asp Ala Gln Asp Ile Asp Glu Asp Val Asp Leu Lys Gly Val Thr
      115     120     125
Ile Asp Tyr Asp Lys Ile Lys Glu Gln Val Asp Lys Phe Tyr Gly Leu
      130     135     140
Thr Ser Lys Asp Asp Gln Tyr Val Ser Tyr Lys Glu Thr Gln Arg Leu
145     150     155     160
Met Asn Ser Leu Asn Gly His Thr Arg Val Val Glu Asp Gly Gly His
      165     170     175
Phe Leu Glu Glu Glu Gly Phe Val Thr Phe Thr Ser Leu Ile Asn Arg
      180     185     190
Met Gln Gly Tyr Met Thr Arg
      195

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<210> 6067
 <211> 179
 <212> PRT
 <213> S.epidermidis

<400> 6067

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Cys Ile Ile Ile Lys Lys Glu Val Lys Thr Met Lys Cys Leu Phe Lys
1      5      10      15
Met Leu Ser Ile Ile Ile Ile Met Leu Ser Thr Phe Thr Leu Phe Ile
      20      25      30
Ser Pro Ser Thr Tyr Ala Asn Glu Asp Glu Asn Trp Thr Lys Ile Lys
      35      40      45
Asn Arg Gly Glu Leu Arg Val Gly Leu Ser Ala Asp Tyr Ala Pro Leu
      50      55      60
Glu Phe Glu Lys Thr Ile His Gly Lys Thr Glu Tyr Ala Gly Val Asp
65      70      75      80
Ile Glu Leu Ala Lys Lys Ile Ala Lys Asp Asn His Leu Lys Leu Lys
      85      90      95
Ile Val Asn Met Gln Phe Asp Ser Leu Leu Gly Ala Leu Lys Thr Gly
      100     105     110
Lys Ile Asp Ile Ile Ile Ser Gly Met Thr Thr Thr Pro Glu Arg Lys
      115     120     125
Lys Glu Val Asp Phe Thr Lys Pro Tyr Met Ile Thr Asn Asn Val Met
      130     135     140

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Met Ile Lys Lys Asp Asp Ala Lys Arg Tyr Gln Asn Ile Lys Asp Phe
 145 150 155 160
 Glu Gly Lys Lys Ile Ala Ala Gln Lys Gly Thr Asp Gln Ala His Pro
 165 170 175
 Cys Thr Asn

<210> 6068

<211> 485

<212> PRT

<213> S.epidermidis

<400> 6068

Ser Arg Tyr Met Ala Tyr Phe Asn Lys Phe Leu Ser Asn Ser Glu Arg
 1 5 10 15
 Lys Arg Gly Lys Val Ser Lys Lys Val Ala Ile Ile Gly Ala Gly Ile
 20 25 30
 Thr Gly Leu Ser Ser Ala Tyr Phe Ile Lys Lys Gln Asp Pro Ser Ile
 35 40 45
 Glu Val Thr Ile Phe Glu Ala Ser Asn Arg Val Gly Gly Lys Ile Gln
 50 55 60
 Thr Tyr Arg Ser Asp Gly Tyr Thr Ile Glu Leu Gly Pro Glu Ser Tyr
 65 70 75 80
 Leu Gly Arg Lys Thr Ile Met Thr Asp Val Ala Lys Asp Ile Gly Leu
 85 90 95
 Glu Asn Asp Leu Ile Thr Asn Thr Thr Gly Gln Ser Tyr Ile Phe Ala
 100 105 110
 Lys Asn Lys Leu Tyr Pro Ile Pro Gly Gly Ser Ile Met Gly Ile Pro
 115 120 125
 Thr Asp Ile Lys Pro Phe Ile Lys Thr Arg Leu Ile Ser Pro Ile Gly
 130 135 140
 Lys Leu Arg Ala Gly Leu Asp Leu Phe Lys Lys Pro Ile Glu Ile Glu
 145 150 155 160
 Asp Asp Ile Ser Val Gly Ser Phe Phe Arg Gln Arg Leu Gly Asn Glu
 165 170 175
 Val Leu Glu Asn Leu Ile Glu Pro Leu Met Gly Gly Ile Tyr Gly Thr
 180 185 190
 Asp Ile Asp Gln Leu Ser Leu Met Ser Thr Phe Pro Asn Phe Lys Glu
 195 200 205
 Lys Glu Glu Gln Phe Gly Ser Leu Ile Lys Gly Met Lys Asp Glu Lys
 210 215 220
 Glu Gln Arg Ile Lys Lys Arg Gln Leu Tyr Pro Gly Ala Pro Lys Gly
 225 230 235 240
 Gln Phe Lys Gln Phe Arg His Gly Leu Ser Ser Phe Ile Glu Ala Leu
 245 250 255
 Val Lys Asp Ile Glu Ser Lys Gly Val His Ile Arg Tyr Asn Thr Pro
 260 265 270
 Val Lys Asp Ile Leu Ile Ser Gln Lys Asp Tyr Glu Ile Leu Leu Glu
 275 280 285
 Asp Asp Ser Lys Glu Lys Phe Asn Gly Leu Leu Val Thr Thr Pro His
 290 295 300
 Gln Val Phe Leu Asn Trp Phe Ser His Asp Pro Ala Phe Asp Tyr Phe
 305 310 315 320
 Lys Asn Met Asp Ser Thr Thr Val Ala Thr Val Val Leu Ala Phe Asp
 325 330 335
 Glu Lys Asn Ile Thr Asn Thr Tyr Asp Gly Thr Gly Phe Val Ile Ala

			340					345					350				
Arg	Thr	Ser	Gln	Thr	Asp	Ile	Thr	Ala	Cys	Thr	Trp	Thr	Ser	Lys	Lys		
		355						360					365				
Trp	Pro	Phe	Thr	Thr	Pro	Glu	Gly	Lys	Val	Leu	Ile	Arg	Ala	Tyr	Ile		
	370					375					380						
Gly	Lys	Pro	Gly	Asp	Thr	Val	Val	Asp	Asp	His	Thr	Asp	Glu	Glu	Ile		
385					390					395					400		
Val	Ser	Ile	Val	Arg	Lys	Asp	Leu	Ser	Gln	Met	Met	Thr	Ile	Ser	Gly		
				405					410					415			
Asn	Pro	Asp	Phe	Thr	Ile	Val	Asn	Arg	Leu	Pro	Lys	Ser	Met	Pro	Gln		
		420						425					430				
Tyr	His	Val	Gly	His	Ile	Lys	Met	Ile	Lys	Glu	Ile	Gln	Gln	His	Ile		
	435					440						445					
Lys	Thr	Thr	Tyr	Pro	Arg	Leu	Arg	Val	Thr	Gly	Ala	Pro	Phe	Glu	Ala		
	450					455					460						
Val	Gly	Leu	Pro	Asp	Cys	Ile	Gln	Gln	Gly	Lys	Asn	Ala	Val	Asp	Glu		
465					470					475					480		
Ile	Leu	Glu	Glu	Leu													
				485													

<210> 6069

<211> 116

<212> PRT

<213> S.epidermidis

<400> 6069

Thr	Asn	Asp	Met	Asn	Tyr	Val	Arg	Gly	Glu	Phe	Val	Met	Lys	Ser	Val		
1				5					10					15			
Asn	Phe	Lys	Lys	Ile	Thr	Ile	Leu	Phe	Phe	Ser	Thr	Ala	Phe	Leu	Ile		
		20						25					30				
Leu	Ile	Phe	Ser	Leu	Ile	Phe	Leu	Thr	Lys	Lys	Lys	Leu	Tyr	Asn	Ala		
	35						40					45					
Glu	Leu	Leu	Leu	Asn	Glu	Val	Lys	Thr	Tyr	Phe	Arg	Glu	Val	Lys	Gly		
	50				55						60						
Ser	Tyr	Ile	Val	Gln	Glu	Pro	Ile	Val	Leu	Glu	Asn	Ile	Asn	His	Asn		
65				70					75					80			
Gln	Pro	Ile	Tyr	Gln	Gly	Gly	Ile	Thr	Val	Leu	Lys	Asn	Asp	His	Leu		
			85					90					95				
Ile	Asn	Tyr	Glu	Phe	Tyr	Ala	Asp	Ala	Val	Ser	Gly	Gln	Ile	Ile	Asp		
		100						105					110				
Ile	Ile	Glu	Leu														
		115															

<210> 6070

<211> 157

<212> PRT

<213> S.epidermidis

<400> 6070

Ile	Asn	Ser	Ile	Asp	Arg	Gln	Ser	Phe	Thr	Asp	Leu	Ile	Gln	Thr	Lys		
1				5					10					15			
Phe	Lys	Met	Val	Arg	Ile	Glu	Ala	Gly	Tyr	Thr	Gln	Asp	Thr	Met	Ala		
		20						25					30				
Gln	Thr	Ile	Gly	Leu	Ser	Lys	Lys	Thr	Leu	Val	Gln	Ile	Glu	Lys	Glu		
	35					40						45					
Arg	Val	Leu	Pro	Asn	Trp	Thr	Thr	Cys	Val	Ser	Ile	Cys	Ala	Leu	Phe		

50	55	60
Arg Asp Ser Asp Val Leu Asn Ser Thr Phe Gly Cys Asp Pro Leu Glu		
65	70	75
Ile Val Gln Thr Ile Ser Arg Asn His Cys Ala Tyr Pro Asn His Ser		80
	85	90
Thr Thr Ser Asp Ile Tyr Trp Asn Thr Ile Asp Thr Arg Asn Gly Phe		95
	100	105
Ile Leu Gln Ser Asn Lys Val Ser Asn Ile Tyr Arg Val Leu Asn Asn		110
	115	120
Glu Lys Gln Pro Ile Phe Gly Thr Ser Lys Met Arg Glu Ala Glu Thr		125
	130	135
Tyr Phe Asn Arg Asn Ala Lys Glu Glu Leu Ile His Val		140
145	150	155

<210> 6071

<211> 442

<212> PRT

<213> S.epidermidis

<400> 6071

Val Arg Ser Ile Glu Met Thr His Tyr His Phe Val Gly Ile Lys Gly		
1	5	10
Ser Gly Met Ser Ser Leu Ala Gln Ile Met His Asp Leu Gly His Glu		15
	20	25
Val Gln Gly Ser Asp Ile Glu Ser Tyr Val Phe Thr Glu Val Ala Leu		30
	35	40
Arg Asn Lys Gly Ile Lys Ile Leu Pro Phe Asp Ala Asn Asn Ile Thr		45
	50	55
Lys Glu Met Val Val Ile Gln Gly Asn Ala Phe Pro Asp Asn His Glu		60
65	70	75
Glu Ile Val Arg Ala His Glu Leu Lys Leu Asp Ile Ile Lys Tyr His		80
	85	90
Asp Phe Leu Gly His Val Ile Asn Gln Tyr Thr Ser Val Ala Val Thr		95
	100	105
Gly Ala His Gly Lys Thr Ser Thr Thr Gly Leu Leu Ser His Val Met		110
	115	120
Asn Gly Asp Lys Lys Thr Ser Phe Leu Ile Gly Asp Gly Thr Gly Met		125
	130	135
Gly Leu Pro Gly Ser Asp Tyr Phe Ala Phe Glu Ala Cys Glu Tyr Arg		140
145	150	155
Arg His Phe Leu Ser Tyr His Pro Asp Tyr Ala Ile Met Thr Asn Ile		160
	165	170
Asp Phe Asp His Pro Asp Tyr Phe Lys Asn Ile Asp Asp Val Tyr Asp		175
	180	185
Ala Phe Gln His Met Ala Leu Asn Val Lys Lys Gly Ile Ile Ala Trp		190
	195	200
Gly Asp Asp Glu Tyr Leu Arg Lys Leu Asp Val Asp Ile Pro Val Tyr		205
	210	215
Tyr Tyr Gly Phe Lys Glu Thr Asp Asp Ile Tyr Ala Lys Asn Ile Gln		220
225	230	235
Ile Thr Glu Lys Gly Thr Gln Phe Asp Val Tyr Ile Lys Gly Glu Phe		240
	245	250
Tyr Asp Gln Phe Leu Ser Pro Gln Tyr Gly Asn His Asn Ile Leu Asn		255
	260	265
Ala Leu Ala Val Ile Ala Ile Ser Tyr Leu Glu Asn Met Asn Val Glu		270
	275	280
		285

Asn Ile Lys Glu Ala Leu Ile Thr Phe Gly Gly Val Lys Arg Arg Phe
 290 295 300
 Asn Glu Thr Lys Val Ser Asn Gln Val Ile Val Asp Asp Tyr Ala His
 305 310 315 320
 His Pro Arg Glu Ile Ser Ala Thr Ile Glu Thr Ala Arg Lys Lys Tyr
 325 330 335
 Pro Gln Lys Asp Val Val Ala Val Phe Gln Pro His Thr Phe Ser Arg
 340 345 350
 Thr Gln Ala Phe Leu Asn Glu Phe Ala Glu Ser Leu Ser Lys Ala Asp
 355 360 365
 Gln Val Phe Leu Cys Glu Ile Phe Gly Ser Ile Arg Glu Asn Thr Gly
 370 375 380
 Asp Leu Thr Ile Glu Asp Leu Ile Asn Arg Ile Asp Gly Ser Thr Leu
 385 390 395 400
 Ile Asp Glu Asn Ser Ile Asp Val Leu Glu Lys Phe Asp Asn Ala Val
 405 410 415
 Ile Leu Phe Met Gly Ala Gly Asp Ile Gln Lys Leu Leu Lys Ala Tyr
 420 425 430
 Phe Glu Lys Leu Gly Val Lys Asn Asp Phe
 435 440

<210> 6072
 <211> 65
 <212> PRT
 <213> S.epidermidis

<400> 6072
 Leu Phe Phe Ile Thr Lys Phe Tyr Ser Val Asn Leu Val Thr Leu Asn
 1 5 10 15
 Ile Ile Ser Tyr Ser Leu Asn Ser Leu Tyr Ser Tyr Trp Asn Val Arg
 20 25 30
 Met Ser Glu Phe Cys Ser Phe Ile Tyr Phe Pro Ser Ile Tyr Ser Leu
 35 40 45
 Leu Phe Gly Glu Ile Ser Arg Lys Lys Tyr Leu Thr Ile Ser Val Leu
 50 55 60
 Ile
 65

<210> 6073
 <211> 79
 <212> PRT
 <213> S.epidermidis

<400> 6073
 Leu Gly Phe Ile Thr Ser Lys Lys Asp Met Asp Tyr Ile Thr Lys Asn
 1 5 10 15
 Ile Asn Ser Phe Thr Lys Arg Leu Ala Glu Ala Ile Asn Gly Arg Gln
 20 25 30
 Ile Asn Ala Leu Lys Ser Asn Pro Ser Ser Lys Lys Ile Thr Trp Asn
 35 40 45
 Trp Gly Gly Thr Phe Tyr Pro Asn Ala Pro Lys Ser Gly Ile Arg Val
 50 55 60
 Arg Arg Ser Leu Gly Ile Asn Gly Ala Ile Val Glu Ser Gly Ser
 65 70 75

<210> 6074

<211> 146
 <212> PRT
 <213> S.epidermidis

<400> 6074

Arg	Ser	Val	Ile	Ile	Met	Ser	Glu	Thr	Ile	Phe	Ser	Lys	Ile	Ile	Ser
1				5					10					15	
Gly	Glu	Ile	Pro	Ser	Phe	Lys	Ile	Tyr	Glu	Asn	Asp	Tyr	Val	Tyr	Ala
			20					25					30		
Phe	Leu	Asp	Ile	Ser	Gln	Val	Ser	Lys	Gly	His	Thr	Leu	Leu	Val	Pro
		35					40					45			
Lys	Lys	Pro	Ser	Ala	Asn	Ile	Phe	Glu	Thr	Asp	Glu	Glu	Thr	Met	Lys
	50					55				60					
His	Ile	Gly	Val	Ala	Leu	Pro	Lys	Val	Ala	Asn	Ala	Ile	Lys	Asn	Ala
65					70					75				80	
Phe	His	Pro	Asp	Gly	Leu	Asn	Ile	Ile	Gln	Asn	Asn	Gly	Glu	Tyr	Ala
				85					90					95	
Asp	Gln	Ser	Val	Phe	His	Ile	His	Phe	His	Leu	Ile	Pro	Arg	Tyr	Glu
			100					105					110		
Asn	Asp	Ile	Asp	Gly	Phe	Gly	Tyr	Lys	Trp	Glu	Thr	His	Glu	Asp	Val
		115					120					125			
Ile	Asp	Asp	Glu	Thr	Lys	Gln	Lys	Ile	Ala	Thr	Gln	Ile	Gln	Ala	Gln
	130					135					140				
Ile	Ser														
145															

<210> 6075
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6075

Asn	Val	Tyr	Met	Phe	Lys	Ile	Cys	Asp	Ser	Tyr	Met	Ile	Tyr	Ile	Lys
1				5					10					15	
Leu	Gly	Ser	Ile	Glu	Ile	Met	Thr	Leu	Phe	Arg	Ile	Ala	Leu	Asp	Ile
			20					25				30			
Ile	Gln	Leu	Leu	Ser	Ala	Ile	Thr	Asn	Asn	Leu	Ser	Lys	Ile	Leu	Leu
		35					40					45			
Ser	Phe	Ser	Val												
	50														

<210> 6076
 <211> 68
 <212> PRT
 <213> S.epidermidis

<400> 6076

Ser	Leu	Tyr	Ile	Arg	His	Leu	Val	Asn	Phe	Val	Tyr	Trp	Tyr	Leu	Leu
1				5					10					15	
Asn	Tyr	Ala	Lys	Gly	Pro	Tyr	Phe	Ser	Lys	Tyr	Phe	Asn	Val	Lys	Leu
		20						25				30			
His	Ile	Asn	Ser	Lys	Tyr	Phe	Gly	Glu	Thr	Leu	Glu	Gly	Thr	Gly	Gln
		35					40					45			
Ala	Glu	Asp	Tyr	Arg	Leu	Lys	Leu	Ser	Pro	Lys	Lys	Ala	Ser	Gln	Gln
	50					55					60				
Asn	Glu	Val	Leu												

65

<210> 6077
 <211> 211
 <212> PRT
 <213> S.epidermidis

<400> 6077

Ala	Gly	Asp	Ile	Met	Tyr	Asn	Phe	Ile	Ser	Lys	Ile	Leu	Asp	Val	Ile
1				5					10					15	
Leu	Val	Lys	Met	Ser	Lys	Ser	Leu	Tyr	Val	Ile	Gly	Lys	Glu	Asn	Ile
			20					25					30		
Pro	Lys	Asp	Ser	Lys	Tyr	Val	Val	Thr	Cys	Thr	His	Glu	Ser	Tyr	Asn
			35				40					45			
Glu	Val	Ile	Met	Leu	Gly	Met	Ala	Leu	Leu	Pro	Asn	Gln	Ile	His	Tyr
			50			55					60				
Met	Ala	Lys	Lys	Glu	Leu	Phe	Lys	Asn	Gln	Trp	Ala	Gly	Lys	Phe	Leu
65					70				75					80	
Lys	Ser	Leu	Asn	Ala	Phe	Pro	Val	Asp	Arg	Glu	Asn	Pro	Gly	Pro	Ser
				85				90					95		
Thr	Leu	Lys	Lys	Pro	Val	Asn	Leu	Leu	Lys	Glu	His	Lys	Thr	Ile	Gly
			100				105						110		
Ile	Phe	Pro	Thr	Gly	His	Arg	Thr	Ser	Val	Glu	Gly	Ala	Pro	Leu	Lys
		115				120						125			
Arg	Gly	Ala	Ala	Thr	Ile	Ala	Met	Leu	Gly	Lys	Ala	Pro	Ile	Leu	Pro
		130				135					140				
Ala	Ala	Tyr	Val	Gly	Pro	Lys	Lys	Ile	His	Gly	Leu	Ile	Thr	Gly	Gln
145					150					155					160
Ala	Leu	Ile	Lys	Ile	Gly	Lys	Pro	Ile	Glu	Met	Asp	Asp	Ile	Pro	Lys
				165				170					175		
Asp	Leu	Lys	Arg	Asn	Glu	Lys	Val	Asp	Phe	Leu	Thr	Lys	Glu	Ile	Glu
			180					185					190		
Arg	Arg	Thr	Thr	Gln	Leu	Gln	Lys	Glu	Leu	Asn	Glu	Ile	Ser	Cys	Ser
		195				200						205			
Leu	Lys	Lys													
		210													

<210> 6078
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 6078

Ala	Trp	Asp	Ile	Ile	Ile	Val	Pro	Gly	Phe	Leu	Ile	Tyr	Ile	Leu	Leu
1				5					10					15	
Phe	Leu	Asn	Pro	Trp	Ile	Leu	His	Arg	Leu	Ser	Thr	Asn	Arg	Tyr	Gly
			20					25					30		
Lys	Met	Lys	Glu	Tyr	Lys	Val	Lys	Leu	Phe	Leu	Ile	Ile	His	Thr	Val
		35					40					45			
Lys	Phe														
	50														

<210> 6079
 <211> 371
 <212> PRT
 <213> S.epidermidis

6077 = 6078

<400> 6079

His Leu Ser Ile Leu Lys Tyr Leu Ile Lys Cys Asn Met Leu Ser Leu
 1 5 10 15
 Val Arg Met Ile Gln Leu Trp Gly Asp Ser Arg Val Arg Ser Lys Asn
 20 25 30
 Asp Thr Ile Leu Lys Ala Ile Lys Gly Glu Ser Thr Ser His Thr Pro
 35 40 45
 Val Trp Phe Met Arg Gln Ala Gly Arg Ser Gln Pro Glu Tyr Arg Lys
 50 55 60
 Leu Lys Glu Lys Tyr Ser Leu Phe Glu Ile Thr His Gln Pro Glu Leu
 65 70 75 80
 Cys Ala Tyr Val Thr His Leu Pro Val Asp Asn Tyr Gln Thr Asp Ala
 85 90 95
 Ala Val Leu Tyr Lys Asp Ile Met Thr Pro Leu Lys Pro Ile Gly Val
 100 105 110
 Asp Val Glu Ile Lys Ser Gly Ile Gly Pro Val Ile Ser Asn Pro Ile
 115 120 125
 Gln Thr Val Lys Asp Val Glu Arg Leu Ser Gln Ile Asp Pro Lys Arg
 130 135 140
 Asp Val Pro Tyr Val Leu Asp Thr Ile Lys Leu Leu Thr Glu Glu Lys
 145 150 155 160
 Leu Asn Val Pro Leu Ile Gly Phe Thr Gly Ala Pro Phe Thr Leu Ala
 165 170 175
 Ser Tyr Met Ile Glu Gly Gly Pro Ser Lys Asn Tyr Asn Phe Thr Lys
 180 185 190
 Ala Met Met Tyr Arg Asp Glu Glu Thr Trp Phe Ala Leu Met Asn His
 195 200 205
 Leu Val Asp Ile Ser Ile Asp Tyr Val Val Ala Gln Val Glu Ala Gly
 210 215 220
 Ala Glu Ile Ile Gln Ile Phe Asp Ser Trp Val Gly Ala Leu Asn Val
 225 230 235 240
 Lys Asp Tyr Arg Tyr Tyr Ile Lys Pro Ala Met Asn Lys Leu Ile Ser
 245 250 255
 Gly Ile Lys Ala Tyr Tyr Asp Val Pro Ile Ile Leu Phe Gly Val Gly
 260 265 270
 Ala Ser His Leu Ile Asn Glu Trp Asn Asp Leu Pro Ile Asp Val Leu
 275 280 285
 Gly Leu Asp Trp Arg Thr Thr Ile Lys Gln Ala Asp Lys Met Gly Val
 290 295 300
 Asn Lys Ala Ile Gln Gly Asn Leu Asp Pro Ser Val Leu Leu Ala Pro
 305 310 315 320
 Trp Asp Val Ile Glu Ser Arg Leu Lys Asp Ile Leu Asn Gln Gly Leu
 325 330 335
 Asn Arg Gly Lys His Ile Phe Asn Leu Gly His Gly Val Phe Pro Glu
 340 345 350
 Val Lys Pro Glu Thr Leu Arg Lys Val Thr Glu Phe Val His Asn Tyr
 355 360 365
 Thr Ala Lys
 370

<210> 6080

<211> 42

<212> PRT

<213> S.epidermidis

<400> 6080

Leu Asn Gly Ile Ser Ser Ser Asn Ser Ser Gln Leu Ile Met Phe Val
 1 5 10 15
 Glu Leu Lys Asn Gly Asn His His Ile Tyr Tyr Gly Ser Tyr Arg Met
 20 25 30
 Asn Tyr Ser Cys Asn Ile Ile Ser Leu His
 35 40

<210> 6081

<211> 189

<212> PRT

<213> S.epidermidis

<400> 6081

Leu Leu Leu Ile Lys Tyr Ser Val Tyr Tyr Val Lys Ile Glu Leu Arg
 1 5 10 15
 Lys Ile Lys Gly Ala Ile Met Met Ile Ser Tyr Lys Asn Ile Leu Ile
 20 25 30
 Ala Val Asp Gly Ser His Glu Ala Glu Trp Ala Phe Asn Lys Ala Val
 35 40 45
 Gly Val Ala Lys Arg Asn Asp Ala Gln Leu Thr Ile Val Asn Val Ile
 50 55 60
 Asp Ser Arg Thr Tyr Ser Ser Tyr Glu Val Tyr Asp Ala Gln Phe Thr
 65 70 75 80
 Glu Lys Ser Lys His Phe Ser Glu Glu Leu Leu Lys Gly Tyr Lys Glu
 85 90 95
 Val Ala Thr Asn Ala Gly Val Lys Asn Val Asp Thr Arg Leu Glu Phe
 100 105 110
 Gly Ser Pro Lys Ala Ile Ile Pro Lys Lys Leu Ala Arg Asp Val Gly
 115 120 125
 Ala Asp Leu Ile Met Ser Gly Thr Ser Gly Leu Asn Ala Val Glu Arg
 130 135 140
 Phe Ile Val Gly Ser Val Ser Glu Ala Ile Val Arg His Ala Pro Cys
 145 150 155 160
 Asp Val Leu Val Val Arg Thr Glu Glu Met Pro Glu Asp Phe Gln Pro
 165 170 175
 Gln Val Ala Thr Pro Gln Leu Arg Glu Lys Tyr Gln Asp
 180 185

<210> 6082

<211> 288

<212> PRT

<213> S.epidermidis

<400> 6082

Gly Val Leu Ile Met Asn Val Phe Gln Met Arg Asp Lys Leu Lys Ala
 1 5 10 15
 Arg Leu Lys His Leu Asp Val Glu Phe Lys Phe Asp Arg Glu Glu Glu
 20 25 30
 Thr Leu Arg Ile Val Arg Ile Asp Asn His Lys Gly Val Thr Ile Lys
 35 40 45
 Leu Asn Ala Ile Val Ala Lys Tyr Glu Glu Gln Lys Glu Lys Ile Ile
 50 55 60
 Asp Glu Ile Cys Tyr Tyr Val Glu Glu Ala Ile Ala Gln Met Gly Asp
 65 70 75 80
 Glu Val Ile Asn Asn Val Glu Asp Ile Gln Ile Met Pro Val Ile Arg

				85					90					95			
Ala	Thr	Ser	Phe	Asp	Lys	Glu	Thr	Lys	Glu	Gly	His	Ala	Phe	Val	Leu		
			100					105					110				
Thr	Glu	His	Thr	Ala	Glu	Thr	Asn	Ile	Tyr	Tyr	Ala	Leu	Asp	Leu	Gly		
		115					120					125					
Lys	Ser	Tyr	Arg	Leu	Ile	Asp	Glu	Asn	Met	Leu	Gln	Thr	Leu	Asn	Leu		
	130					135					140						
Thr	Ala	Gln	Gln	Val	Lys	Glu	Met	Ser	Leu	Phe	Asn	Val	Arg	Lys	Leu		
145					150					155					160		
Glu	Cys	Arg	Tyr	Ser	Thr	Asp	Glu	Val	Lys	Gly	Asn	Ile	Phe	Tyr	Phe		
				165					170					175			
Ile	Asn	Thr	Asn	Asp	Gly	Tyr	Asp	Ala	Ser	Arg	Ile	Leu	Asn	Thr	Ser		
			180					185					190				
Phe	Leu	Asn	His	Ile	Gln	His	Gln	Cys	Glu	Gly	Glu	Met	Leu	Val	Gly		
		195					200					205					
Val	Pro	His	Gln	Asp	Val	Leu	Ile	Leu	Ala	Asp	Ile	Arg	Asn	Lys	Thr		
	210					215					220						
Gly	Tyr	Asp	Val	Met	Ala	His	Leu	Thr	Met	Glu	Phe	Phe	Thr	Lys	Gly		
225					230					235					240		
Leu	Val	Pro	Ile	Thr	Ser	Leu	Ser	Phe	Gly	Tyr	Asp	Asn	Gly	His	Leu		
				245					250					255			
Glu	Pro	Ile	Phe	Ile	Leu	Gly	Lys	Asn	Asn	Lys	Gln	Lys	Arg	Asp	Pro		
			260					265					270				
Asn	Val	Ile	Gln	Arg	Leu	Glu	Ala	Asn	Arg	Lys	Lys	Phe	Lys	Lys	Asp		
		275					280						285				

<210> 6083

<211> 47

<212> PRT

<213> S.epidermidis

<400> 6083

Asp	Ser	Ser	Phe	Phe	Phe	Phe	Val	Val	Met	Lys	Lys	Gln	Lys	Arg	Val
1				5					10					15	
Leu	His	Ala	Tyr	Arg	Asp	Ile	Leu	Phe	Tyr	Val	Ser	Ser	Pro	Tyr	Ser
			20					25					30		
Asp	Ser	Tyr	Ala	Thr	Arg	Pro	His	Trp	Glu	Gln	His	Arg	Ala	Arg	
		35					40					45			

<210> 6084

<211> 103

<212> PRT

<213> S.epidermidis

<400> 6084

Met	Glu	Ser	Ile	Thr	Val	Asp	Glu	Leu	Lys	Lys	Lys	Ile	Leu	Asp	Ser
1				5					10					15	
Asn	Pro	Val	Asn	Ile	Val	Asp	Val	Arg	Thr	Asn	Glu	Glu	Thr	Glu	Met
			20					25					30		
Gly	Val	Ile	Pro	Gly	Ala	Lys	Thr	Ile	Pro	Met	Asp	Glu	Ile	Pro	Asp
		35					40					45			
Asn	Leu	Lys	Glu	Phe	Asn	Lys	Asn	Asp	Thr	Tyr	Tyr	Ile	Val	Cys	Ala
	50					55					60				
Ala	Gly	Ser	Arg	Ser	Ala	Lys	Val	Val	Ser	Tyr	Leu	Glu	Glu	Gln	Gly
65					70					75				80	
Val	His	Ala	Val	Asn	Val	Glu	Gly	Gly	Met	Asn	Ala	Trp	Gly	Asp	Glu

95

<400> 6085

Leu 1	Tyr	Lys	Ile	Lys 5	Gly	Leu	Asn	Ile	Leu 10	Ala	Gln	Leu	Ser	Asp 15	Leu
Glu	Ile	Ala	Asn 20	Leu	Ser	Lys	Leu	Lys 25	Pro	Ile	Ser	Glu	Ile 30	Ala	Arg
Lys	Val	Gly 35	Ile	Thr	Glu	Asp	Ala 40	Leu	Glu	Pro	Tyr	Gly 45	His	Tyr	Lys
Ala	Lys 50	Ile	Asp	Ile	Asn	Gln 55	Ile	Gln	Glu	Gln	Lys 60	Lys	Lys	Gly	Lys
Val 65	Val	Leu	Val	Thr	Ala 70	Met	Ser	Pro	Thr	Pro 75	Ala	Gly	Glu	Gly 80	Lys
Ser	Thr	Val	Thr	Val 85	Gly	Leu	Ala	Asp 90	Ala	Phe	Asn	Lys	Leu	Asn 95	His
Asn	Val	Thr	Val 100	Ala	Leu	Arg	Glu	Pro 105	Ala	Leu	Gly	Pro	Thr 110	Phe	Gly
Ile	Lys	Gly 115	Gly	Ala	Thr	Gly	Gly 120	Gly	Tyr	Ala	Gln	Val 125	Leu	Pro	Met
Glu	Asp 130	Ile	Asn	Leu	His	Phe 135	Asn	Gly	Asp	Phe	His 140	Ala	Ile	Thr	Thr
Ala 145	Asn	Asn	Ala	Leu	Ser 150	Ala	Phe	Ile	Asp	Asn 155	His	Leu	His	Gln 160	Gly
Asn	Glu	Leu	Gly 165	Ile	Asp	Gln	Arg	Arg	Ile 170	Glu	Trp	Lys	Arg	Val 175	Leu
Asp	Met	Asn	Asp 180	Arg	Ala	Leu	Arg	His 185	Val	Asn	Val	Gly	Leu 190	Gly	Gly
Thr	Thr	His 195	Gly	Val	Pro	Arg	Glu 200	Asp	Gly	Phe	Asn 205	Ile	Thr	Val	Ala
Ser	Glu 210	Ile	Met	Ala	Ile	Leu 215	Cys	Leu	Ser	Arg	Asn 220	Ile	Lys	Asp	Leu
Lys 225	Glu	Lys	Ile	Ser	Arg 230	Ile	Thr	Ile	Gly	Tyr 235	Thr	Arg	His	His 240	Lys
Pro	Ile	Thr	Val 245	Ser	Asp	Leu	Lys	Val	Glu 250	Gly	Ala	Leu	Thr 255	Leu	Ile
Leu	Lys	Asp	Ala 260	Ile	Lys	Pro	Asn 265	Leu	Val	Gln	Thr	Ile 270	Glu	Gly	Thr
Pro	Ala 275	Leu	Val	His	Gly	Gly	Pro 280	Phe	Ala	Asn	Ile 285	Ala	His	Gly	Cys
Asn	Ser 290	Ile	Leu	Ala	Thr	Glu 295	Thr	Ala	Arg	Asn 300	Leu	Ser	Asp	Ile	Val
Val 305	Thr	Glu	Ala	Gly	Phe 310	Gly	Ser	Asp	Leu	Gly 315	Ala	Glu	Lys	Phe 320	Met
Asn	Ile	Lys	Ala 325	Arg	Glu	Ala	Gly	Phe	Asp 330	Pro	Ser	Ala 335	Val	Val	Val
Val	Ala	Thr	Ile 340	Arg	Ala	Leu	Lys 345	Met	His	Gly	Gly 350	Val	Ala	Lys	Asp
Gln	Leu	Gln 355	His	Glu	Asn	Ile	Glu 360	Ala	Val	Glu	Ala 365	Gly	Leu	Val	Asn

Leu Glu Arg His Val Asn Asn Ile Lys Lys Tyr Gly Val Glu Pro Ile
 370 375 380
 Val Ala Leu Asn Ala Phe Ile His Asp Thr Pro Ser Glu Thr Ala Cys
 385 390 395 400
 Val Lys Gln Trp Ala Lys Asp Asn Gln Val Arg Ile Ala Leu Thr Glu
 405 410 415
 Val Trp Glu Lys Gly Gly Glu Gly Gly Ile Glu Leu Ala Asn Gln Val
 420 425 430
 Phe Asp Val Met Gln Lys Pro Gln Asn Phe Lys His Leu Tyr Glu Leu
 435 440 445
 Lys Gln Pro Leu Glu Ala Lys Ile Glu Thr Ile Val Lys Glu Ile Tyr
 450 455 460
 Gly Gly Ser Lys Val Asn Phe Ser Ser Lys Thr Gln Lys Gln Leu Lys
 465 470 475 480
 Gln Phe Lys Glu Asn Gly Trp Asp Glu Tyr Pro Ile Cys Met Ala Lys
 485 490 495
 Thr Gln Tyr Ser Phe Ser Asp Asp Gln Thr Leu Leu Gly Ala Pro Asn
 500 505 510
 Asp Phe Glu Ile Thr Ile Arg Glu Leu Glu Ala Lys Thr Gly Ala Gly
 515 520 525
 Phe Ile Val Ala Leu Thr Gly Ala Ile Met Thr Met Pro Gly Leu Pro
 530 535 540
 Lys Lys Pro Ala Ala Leu Asn Met Asp Val Thr Asp Asp Gly Lys Ala
 545 550 555 560
 Ile Gly Leu Phe

<210> 6086

<211> 380

<212> PRT

<213> S.epidermidis

<400> 6086

Gly Asp Lys Met Glu Lys Pro Thr Arg Leu Ala Leu Leu Lys Glu Ile
 1 5 10 15
 Ala Glu Phe Leu Asn Glu Glu Thr Glu Ile Tyr Ser Met Met Gln Gly
 20 25 30
 Ala Leu Arg Leu Leu Ile Asn Gly Ser Asp Phe Ser Thr Gly Trp Ile
 35 40 45
 Phe Tyr Ile Asp Glu Glu Gly His His Asp Leu Val Ser Ser Val Asp
 50 55 60
 Leu Pro Glu Ala Leu Ser Lys Asn His Cys Tyr Tyr Leu Thr Asn Gly
 65 70 75 80
 Ser Cys Trp Cys Val Gln Ala Tyr Gln Asn His Lys Leu Thr Lys Ala
 85 90 95
 Ser Asn Ile Ile Asn Cys Ser Arg Ile Asn Leu Ala Asn His Ala Tyr
 100 105 110
 Asp Lys Glu Thr Asn His Ile Thr His His Ala Thr Val Pro Leu Gln
 115 120 125
 Ser Gly Ser Glu Arg Phe Gly Leu Leu Asn Val Ala Ser Pro Asn Lys
 130 135 140
 Glu His Tyr Ser Glu Glu Asp Leu Glu Leu Leu Glu Ser Val Ala Phe
 145 150 155 160
 Gln Ile Gly Ser Ala Ile Lys Arg Ile Gln Leu Thr Asn Lys Glu Lys
 165 170 175
 Glu Asn Ala Lys Ile Asn Glu Arg Asn Arg Leu Ala Arg Asp Leu His

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<210> 6087
<211> 277
<212> PRT
<213> S.epidermidis
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<400> 6087															
Glu	Glu	Lys	Met	Lys	Phe	Thr	Ile	Pro	Lys	Gln	Phe	Asn	Asp	Tyr	Thr
1				5					10					15	
Leu	Arg	Glu	Ile	Phe	Gln	Tyr	Leu	Lys	Leu	Pro	Lys	Lys	Asp	Leu	His
			20					25					30		
Gln	Leu	Asn	Met	Ser	Lys	Glu	Ile	Leu	Ile	Asn	Lys	Glu	Tyr	Gly	Thr
		35					40					45			
Leu	Leu	Asn	Asn	Val	Lys	Thr	Gly	Asp	His	Val	Glu	Ile	Pro	Thr	Pro
	50					55					60				
Asn	Glu	Val	Ser	Asn	Tyr	Leu	Pro	Ser	Tyr	Arg	Tyr	Ala	Gln	Ile	Tyr
65					70					75					80
Tyr	Glu	Asp	Asp	Asp	Leu	Ala	Ile	Val	Met	Lys	Pro	Lys	Gly	Val	Lys
				85				90						95	
Thr	His	Pro	Asn	Asp	Leu	Lys	Glu	Ser	Asn	Thr	Leu	Met	Asn	His	Val
			100					105					110		
Ile	Tyr	Thr	Val	Asp	Ser	Glu	Tyr	Val	Glu	Pro	Ile	His	Arg	Leu	Asp
		115					120					125			
Gln	Glu	Thr	Val	Gly	Leu	Leu	Ile	Val	Ala	Lys	Asn	Pro	Leu	Met	Lys
	130					135					140				
Lys	Ile	Leu	Asp	Arg	Met	Leu	Glu	Tyr	Asn	Glu	Ile	Thr	Arg	Ile	Tyr
145					150					155					160
Lys	Ala	Asn	Val	Lys	Ala	Leu	Leu	Pro	Ile	Lys	Pro	Gln	Thr	Ile	Asp
				165					170					175	
Met	Pro	Ile	Gly	Lys	Asp	Lys	Phe	His	Ser	Asn	Lys	Arg	Arg	Ile	Ser
			180					185					190		

Asn Thr Gly Gln Arg Ala Ile Thr His Ile Ile Asn Ser Lys Met Ile
 195 200 205
 Lys Glu Gly Val Cys Gln Leu Asp Ile Lys Leu Asp Thr Gly Arg Thr
 210 215 220
 His Gln Ile Arg Val His Leu Ala Glu Ile Gly His Pro Val Ile Gly
 225 230 235 240
 Asp Pro Leu Tyr Gly Thr Ser Thr Leu Arg Gln Leu Glu Leu Asn Ser
 245 250 255
 His Gln Ile Glu Phe Thr His Pro Leu Thr Gln Glu Ile Ile Ser Val
 260 265 270
 Ser Leu Asp Asp Lys
 275

<210> 6088
 <211> 48
 <212> PRT
 <213> S.epidermidis

<400> 6088
 Ile His Arg Ile Gln Tyr Arg Glu Phe Phe Leu Gln Tyr His Leu His
 1 5 10 15
 Val Val Lys Thr His Leu Leu Ala Ile Met Leu Gly Asn Tyr Val Pro
 20 25 30
 Ala Ser Leu Phe Phe Met Ser Phe Asn Ala Lys Asn Lys Arg Arg Gln
 35 40 45

<210> 6089
 <211> 119
 <212> PRT
 <213> S.epidermidis

<400> 6089
 Ile Phe Leu Ile Thr Ile Leu Leu Val Met Leu Gly Gly Gly Ile Gly
 1 5 10 15
 Ala Val Leu Arg Ala Leu Ile Thr Asn Ile Cys Gln Arg Leu Phe Asn
 20 25 30
 Ser Lys Ile Pro Ile Ala Thr Ser Ile Val Asn Ile Thr Gly Ser Leu
 35 40 45
 Ile Ile Gly Phe Met Met Gly His Ala Leu Asp Ser His His Met Phe
 50 55 60
 Pro Phe Phe Val Thr Gly Val Leu Gly Gly Leu Thr Thr Phe Ser Thr
 65 70 75 80
 Leu Ser Ser Glu Leu Val Asn Met Leu Ser Pro Gln Phe Lys Pro Ile
 85 90 95
 Arg Phe Val Val Tyr Ser Leu Leu Gln Phe Ile Leu Gly Phe Ile Ala
 100 105 110
 Cys Phe Tyr Gly Tyr Arg Ile
 115

<210> 6090
 <211> 242
 <212> PRT
 <213> S.epidermidis

<400> 6090
 Val Pro Val Ile Asn Ile Lys Asn Leu Asn Lys Lys Phe Gly Ala Asn


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<210> 6091
<211> 167
<212> PRT
<213> S.epidermidis
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<400> 6091															
Cys	Thr	Val	Ile	Lys	Leu	Gly	Arg	Val	Thr	Tyr	Met	Lys	Cys	Pro	Lys
1				5					10					15	
Cys	Asn	Ser	Thr	His	Ser	Arg	Val	Val	Asp	Ser	Arg	His	Ala	Asp	Glu
			20					25					30		
Ala	Asn	Ala	Ile	Arg	Arg	Arg	Arg	Glu	Cys	Glu	Asn	Cys	Gly	Thr	Arg
		35					40					45			
Phe	Thr	Thr	Phe	Glu	His	Ile	Glu	Val	Ser	Pro	Leu	Ile	Val	Val	Lys
	50					55					60				
Lys	Asp	Gly	Thr	Arg	Glu	Gln	Phe	Leu	Arg	Glu	Lys	Ile	Leu	Asn	Gly
65				70					75					80	
Leu	Val	Arg	Ser	Cys	Glu	Lys	Arg	Pro	Val	Arg	Tyr	Gln	Gln	Leu	Glu
				85					90					95	
Asp	Ile	Thr	Asn	Lys	Val	Glu	Trp	Gln	Leu	Arg	Asp	Glu	Gly	Gln	Thr
			100					105					110		
Glu	Ile	Ser	Ser	Arg	Glu	Ile	Gly	Glu	His	Val	Met	Asn	Leu	Leu	Met
		115					120					125			
His	Val	Asp	Gln	Val	Ser	Tyr	Val	Arg	Phe	Ala	Ser	Val	Tyr	Lys	Glu
	130						135				140				

Phe Lys Asp Val Asp Gln Leu Leu Glu Ser Met Gln Gly Ile Leu Ser
 145 150 155 160
 Asp Asn Lys Arg Ser Asp Lys
 165

<210> 6092

<211> 350

<212> PRT

<213> S.epidermidis

<400> 6092

Leu Lys Lys Met Met Gln Asn Val Ile Lys Thr Ser Lys Ile Leu Lys
 1 5 10 15
 Ala Lys Lys Leu Leu Arg Lys Lys Gly Gln Ile Lys Pro Thr Leu Ala
 20 25 30
 Gln Thr Glu Ile Glu Asp Ser Lys Ile Ser Ser Leu Asn Arg Leu Pro
 35 40 45
 Glu Ala Ile Leu Ser Val Lys Ser Gly Lys Val Ala Gly Val Val Val
 50 55 60
 Glu Lys Pro Val Gly Glu Ala Tyr Leu Lys Gln Asn Ser Glu Leu Thr
 65 70 75 80
 Phe Ser Lys Ile Lys Phe Asn Glu Glu Lys Lys Gln Thr Cys Ile Ala
 85 90 95
 Val Pro Lys Asn Ser Pro Val Leu Leu Asp Lys Leu Asn Gln Thr Ile
 100 105 110
 Asp Asn Val Lys Glu Lys Asn Leu Ile Asp Gln Tyr Met Thr Lys Ala
 115 120 125
 Ala Glu Asp Met Gln Asp Asp Gly Asn Phe Ile Ser Lys Tyr Gly Ser
 130 135 140
 Phe Phe Ile Lys Gly Ile Lys Asn Thr Ile Leu Ile Ser Leu Val Gly
 145 150 155 160
 Val Val Leu Gly Ser Ile Leu Gly Ser Phe Ile Ala Leu Leu Lys Ile
 165 170 175
 Ser Lys Ile Arg Pro Leu Gln Trp Ile Ala Ser Ile Tyr Ile Glu Phe
 180 185 190
 Leu Arg Gly Thr Pro Met Leu Val Gln Val Phe Ile Val Phe Phe Gly
 195 200 205
 Thr Thr Ala Ala Leu Gly Leu Asp Ile Ser Ala Leu Ile Cys Gly Thr
 210 215 220
 Ile Ala Leu Val Ile Asn Ser Ser Ala Tyr Ile Ala Glu Ile Ile Arg
 225 230 235 240
 Ala Gly Ile Asn Ala Val Asp Lys Gly Gln Thr Glu Ala Ala Arg Ser
 245 250 255
 Leu Gly Leu Asn Tyr Arg Gln Thr Met Gln Ser Val Val Met Pro Gln
 260 265 270
 Ala Ile Lys Lys Ile Leu Pro Ala Leu Gly Asn Glu Phe Val Thr Leu
 275 280 285
 Ile Lys Glu Ser Ser Ile Val Ser Thr Ile Gly Val Ser Glu Ile Met
 290 295 300
 Phe Asn Ala Gln Val Val Gln Gly Ile Ser Phe Asp Pro Phe Thr Pro
 305 310 315 320
 Leu Leu Val Ala Ala Leu Leu Tyr Phe Leu Leu Thr Phe Ala Leu Thr
 325 330 335
 Arg Val Met Asn Phe Ile Glu Gly Arg Met Ser Ala Ser Asp
 340 345 350

<210> 6093
 <211> 427
 <212> PRT
 <213> S.epidermidis

<400> 6093

Phe	Arg	Arg	Ile	Leu	Ser	Met	Ala	Asn	Ala	Leu	Ile	Glu	Asp	Leu	Lys
1			5					10					15		
Trp	Arg	Gly	Leu	Ile	Tyr	Gln	Gln	Thr	Asp	Glu	Glu	Gly	Ile	Glu	Glu
		20						25				30			
Leu	Leu	Asn	Lys	Glu	Gln	Val	Thr	Leu	Tyr	Cys	Gly	Ala	Asp	Pro	Thr
		35					40				45				
Ala	Asp	Ser	Leu	His	Ile	Gly	His	Leu	Leu	Pro	Phe	Leu	Thr	Leu	Arg
	50					55					60				
Arg	Phe	Gln	Glu	His	Gly	His	Arg	Pro	Ile	Val	Leu	Ile	Gly	Gly	Gly
65					70					75					80
Thr	Gly	Met	Ile	Gly	Asp	Pro	Ser	Gly	Lys	Ser	Glu	Glu	Arg	Val	Leu
			85						90					95	
Gln	Thr	Glu	Ser	Gln	Val	Glu	Ala	Asn	Val	Lys	Gly	Leu	Ser	Asn	Gln
			100					105					110		
Met	His	Arg	Leu	Phe	Glu	Phe	Gly	Ser	Asp	Lys	Gly	Ala	Lys	Leu	Val
		115					120					125			
Asn	Asn	Lys	Asp	Trp	Leu	Gly	Gln	Ile	Ser	Leu	Ile	Ser	Phe	Leu	Arg
	130					135					140				
Asp	Tyr	Gly	Lys	His	Val	Gly	Val	Asn	Tyr	Met	Leu	Gly	Lys	Asp	Ser
145					150					155					160
Ile	Gln	Thr	Arg	Leu	Glu	His	Gly	Ile	Ser	Tyr	Thr	Glu	Phe	Thr	Tyr
			165						170					175	
Thr	Ile	Leu	Gln	Ala	Ile	Asp	Phe	Gly	Tyr	Leu	Asn	Arg	Glu	Leu	Asn
		180						185					190		
Cys	Lys	Ile	Gln	Val	Gly	Gly	Ser	Asp	Gln	Trp	Gly	Asn	Ile	Thr	Ser
	195						200					205			
Gly	Ile	Glu	Leu	Met	Arg	Arg	Met	Tyr	Gly	Gln	Thr	Glu	Ala	Tyr	Gly
	210					215					220				
Leu	Thr	Ile	Pro	Leu	Val	Thr	Lys	Ser	Asp	Gly	Lys	Lys	Phe	Gly	Lys
225					230					235					240
Ser	Glu	Ser	Gly	Ala	Val	Trp	Leu	Asp	Pro	Glu	Lys	Thr	Ser	Pro	Tyr
			245						250					255	
Glu	Phe	Tyr	Gln	Phe	Trp	Ile	Asn	Gln	Ser	Asp	Glu	Asp	Val	Ile	Lys
			260					265					270		
Phe	Leu	Lys	Tyr	Phe	Thr	Phe	Leu	Glu	Lys	Glu	Glu	Ile	Asn	Arg	Leu
	275					280						285			
Glu	Gln	Ser	Lys	Asn	Glu	Ala	Pro	His	Leu	Arg	Glu	Ala	Gln	Lys	Ala
	290					295					300				
Leu	Ala	Glu	Asn	Val	Thr	Lys	Phe	Ile	His	Gly	Glu	Ala	Ala	Leu	Lys
305					310					315					320
Asp	Ala	Ile	Arg	Ile	Ser	Lys	Ala	Leu	Phe	Ser	Gly	Asp	Leu	Lys	Ser
			325						330					335	
Leu	Ser	Ala	Lys	Glu	Leu	Lys	Glu	Gly	Phe	Lys	Asp	Val	Pro	Gln	Val
		340						345					350		
Thr	Leu	Ser	Thr	Lys	Thr	Thr	Asn	Ile	Val	Glu	Ala	Leu	Ile	Glu	Thr
	355						360						365		
Gly	Ile	Ala	Ser	Ser	Lys	Arg	Gln	Ala	Arg	Glu	Asp	Val	Asn	Asn	Gly
	370					375					380				
Ala	Ile	Tyr	Ile	Asn	Gly	Glu	Arg	Gln	Gln	Ser	Val	Asp	Tyr	Glu	Leu
385					390					395					400

6093 427 PRT S.epidermidis

Ser Ser Lys Asp Leu Ile Glu Asp Glu Ile Thr Ile Ile Arg Arg Gly
 405 410 415
 Lys Lys Lys Tyr Phe Met Val Asn Tyr Gln Ser
 420 425

<210> 6094
 <211> 235
 <212> PRT
 <213> S.epidermidis

<400> 6094
 Thr Cys Tyr Phe Ser Ser Asn Arg Tyr Thr Gly Gly Arg Phe Met Gln
 1 5 10 15
 Gln Glu Thr Thr Ser Trp Tyr Lys Gln Glu Trp Phe Ile Val Leu Ser
 20 25 30
 Leu Leu Phe Ile Phe Pro Leu Gly Leu Phe Leu Met Trp Lys Phe Ser
 35 40 45
 Lys Trp Pro Ser Ile Ala Arg Thr Ile Ile Thr Val Ala Ile Ser Val
 50 55 60
 Ile Val Leu Ala Ser Ile Thr Tyr Tyr Gly Asn Leu Gln Met Ile Val
 65 70 75 80
 Pro Ala Thr Ser Asn Ser Asn Asn Glu Thr Lys Glu Thr Thr Glu Asn
 85 90 95
 Asn Val Asn Asp Lys Asp Glu Arg Asn His Lys Thr Ala Val Glu Glu
 100 105 110
 Thr Lys Thr Asn Tyr Asp Ser Thr Lys Glu Asn Thr Lys Glu Pro Gly
 115 120 125
 Lys Glu Asn Glu Ser Ala Thr Arg Leu Glu Asn Ser Ala Leu Glu Lys
 130 135 140
 Ala Lys Ser Tyr Tyr Asp Phe His Met Ser Lys Leu Gly Ile Tyr
 145 150 155 160
 Asp Ile Leu Thr Ser Glu Tyr Gly Glu Lys Phe Asp Lys Glu Asp Ala
 165 170 175
 Gln Tyr Ala Ile Asp His Leu Glu Ala Asp Tyr Glu Lys Asn Ala Leu
 180 185 190
 Glu Lys Ala Lys Ser Tyr Ala Lys Asp Met His Met Ser Asn Asp Ser
 195 200 205
 Ile Tyr Asp Leu Leu Val Ser Asn Tyr Gly Glu Lys Phe Thr Glu Ser
 210 215 220
 Glu Ala Lys Tyr Ala Ile Glu His Leu Asp Asn
 225 230 235

<210> 6095
 <211> 427
 <212> PRT
 <213> S.epidermidis

<400> 6095
 Gln Met His Leu Asn Glu Ala Phe Thr Tyr Leu Ser Ala Phe Val Leu
 1 5 10 15
 Gly Gly Lys Phe Met Glu His Tyr Asn Arg Asp Asn Phe Glu Lys Ser
 20 25 30
 His Thr Ser Glu Glu Leu Tyr His Arg Thr Ser Arg Ser Gln Ser Asn
 35 40 45
 Ser Leu Lys Arg Lys Asp Phe Val Val Ser Phe Ile Ala Ser Ala Ile
 50 55 60

Val Gly Ser Ala Val Gly Leu Tyr Tyr Lys Asn Lys Ile Tyr Lys Lys
 65 70 75 80
 Thr Asp Glu Leu Lys Glu Lys Glu Gln Asp Leu Arg Ser Lys Val Glu
 85 90 95
 Asn Tyr Arg Gln Arg Ala Glu Asp Thr Val Val Ser Val Lys Ser Lys
 100 105 110
 Val Glu Gln Leu Lys Tyr Asp Ser Lys Asp Asn Ile His Ala Asp Glu
 115 120 125
 Leu Gln Ala Gln Lys Ala Ala Ile Gln Arg Glu Thr Asp Leu Ala Asp
 130 135 140
 Glu Ser Pro Glu Ala Gln Ala Ile Gln Glu Ala Lys Lys Glu Thr Lys
 145 150 155 160
 Gln Val Asp Asp Val Arg Pro Ser Ala Thr Glu Leu Ala Ala Gln Gln
 165 170 175
 Asn Ala Ile Gln His Glu Thr Asp Leu Ala Asp Glu Ser Pro Glu Ala
 180 185 190
 Gln Ala Ile Gln Glu Ala Lys Ser Glu Val Asp Ser Asn Asn Lys Thr
 195 200 205
 Ser Thr Thr His Ile Asp Ser Glu Lys Glu Pro Ser Ala Glu Glu Ile
 210 215 220
 Ala Ile Ala Gln Thr Ala Val Lys Glu Glu Ala Arg Asn His Asp Leu
 225 230 235 240
 Ala Asn Leu Ser Ala Ser Gly Glu Asp Thr Lys Ser Lys Ser Glu Thr
 245 250 255
 Glu Thr Glu Lys Leu Ala Ala Ala Lys Ala Lys Lys Asp Arg Ile
 260 265 270
 Asn Asn Asn Asn Glu Val Ala Ser Asn Thr Lys Asn Leu Met Gln Glu
 275 280 285
 Glu Ala Ile Lys Ala Ser Asn Ser Asp Val Pro Asn Leu Val Thr
 290 295 300
 Asn Leu Asn Gln Ser Gln Ala Ser Asp Thr Asn Ser Val Ala Tyr Arg
 305 310 315 320
 Leu Ala Gln Ala Ala Lys Glu Lys Arg Ser Lys Leu Thr Asn Gly Ser
 325 330 335
 Lys Glu Thr Gln Leu Thr Glu Ala Leu Leu Lys Glu Pro Ser Ile Ala
 340 345 350
 Lys Ala Gln Thr Lys Leu Lys Arg Ile Pro Thr Leu Ile Thr Glu Ser
 355 360 365
 Lys Lys His Ser Asn Asn Pro His Ser Gln Lys Asn Ser Asn Gln Thr
 370 375 380
 Lys Asn Ile Thr Ala Thr Lys Glu Asp Ser Lys Gly Lys Gln Gln His
 385 390 395 400
 Thr Pro Asn Gln Asn Lys Arg Asn Lys Gln Gln Lys Val Glu Lys Thr
 405 410 415
 Ser Ser Lys Ile Glu Lys Arg Thr Phe Asn Asp
 420 425

<210> 6096

<211> 60

<212> PRT

<213> S.epidermidis

<400> 6096

Thr Leu Asn Phe Asn Phe Asn Ile Ile Cys Gln Val Leu Tyr Tyr Asn
 1 5 10 15
 Tyr Tyr Leu Lys Leu Cys His Pro Ile Pro Phe Thr Ile Ile Lys Ile

<213> S.epidermidis

<400> 6100

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Phe Leu Cys Val Tyr Tyr His Phe Val Asp Val Asp Ile Lys Ile Leu
1          5          10          15
Thr Ile Leu Leu Lys Gly Met Phe Phe Ile Leu Ala Glu Ile Cys Asn
          20          25          30
Ser Leu Phe Lys Thr Phe Cys Ile Cys Phe Ile Ser Phe Ile Ala Ile
          35          40          45
Glu Met Phe Ile Leu Leu Ala Asp Phe Val Ile Val Leu Leu Lys
          50          55          60

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<210> 6101

<211> 63

<212> PRT

<213> S.epidermidis

<400> 6101

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Asn Ile Ser Val Ser Gly Phe Phe Ile Asn Asn Lys Phe Lys Ile Asn
1          5          10          15
Leu Phe Leu Ser Tyr Leu Glu His Ser Leu Cys Leu Asn Phe Ile Phe
          20          25          30
Leu Leu Leu Lys Phe Pro Leu Arg Lys Tyr Met Leu Lys Leu Leu Phe
          35          40          45
Arg Ile Ile Val Lys Gly Lys Phe Ile Thr Phe Ile Lys Ile Met
          50          55          60

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<210> 6102

<211> 136

<212> PRT

<213> S.epidermidis

<400> 6102

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Arg Leu Phe Phe Cys Thr Ser Leu Ala Lys Arg Lys Tyr Tyr Ser Phe
1          5          10          15
Asn Lys Trp Thr Asn Ser Thr Ile Thr Ile Trp Lys Gly Ile Leu Ile
          20          25          30
Phe Met Ile Lys Leu Glu Ser Glu Gln Gln Phe Glu Glu Leu Lys Lys
          35          40          45
Gly Tyr Thr Val Phe Glu Phe Thr Ala Gly Trp Cys Pro Asp Cys Lys
          50          55          60
Val Ile Glu Pro Asp Leu Pro Lys Leu Glu Lys Lys Tyr Ser Gln Leu
65          70          75          80
Gln Phe Val Ser Val Asp Arg Asp Gln Phe Ile Asp Ile Cys Val Gln
          85          90          95
Asn Asp Ile Leu Gly Ile Pro Ser Phe Leu Ile Phe Lys Glu Gly Gln
          100          105          110
Leu Leu Gly Ser Tyr Ile Gly Lys Glu Arg Lys Ser Ile Asp Gln Ile
          115          120          125
Asp Gln Phe Leu Ser Gln His Ile
          130          135

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<210> 6103

<211> 204

<212> PRT

<213> S.epidermidis

<400> 6103

Arg Ser Val Val Asn Met Ala Met Asn Phe Lys Val Phe Asp Asn Ser
 1 5 10 15
 Glu Lys Val Ala Glu Tyr Thr Ala Asp Ile Leu Arg Lys Gln Phe Asn
 20 25 30
 Asn Asn Pro Thr Thr Ile Ala Gly Phe His Leu Ser Lys Glu His Ala
 35 40 45
 Pro Val Phe Asp Glu Leu Lys Lys Asn Val Glu Asn His Thr Val Asp
 50 55 60
 Phe Ser Gln Ile Asn Ile Leu Asp Tyr Asp Asn His Ser Tyr Tyr
 65 70 75 80
 Glu Ala Leu Gly Val Pro Thr Gly Gln Ile Tyr Ser Ile Ser Tyr Glu
 85 90 95
 Asn Asp Ala Ile Asp Phe Ile Ser Asp Lys Ile Lys Thr Lys Glu Asn
 100 105 110
 Lys Gly Lys Leu Thr Met Gln Val Leu Thr Ile Asp Glu Asn Gly Lys
 115 120 125
 Leu Asp Ile Ser Val Arg Gln Gly Leu Met Glu Ala Arg Glu Ile Phe
 130 135 140
 Leu Val Ile Thr Gly Ala Asn Lys Arg Asp Met Val Glu Lys Leu Tyr
 145 150 155 160
 Arg Glu Asn Gly Lys Thr Ser Phe Glu Pro Ser Asp Leu Lys Ala His
 165 170 175
 Arg Met Val Asn Val Ile Leu Asp Lys Glu Ala Ala Ala Gly Leu Pro
 180 185 190
 Glu Asp Val Lys Glu Tyr Phe Thr Ala Arg Phe Ala
 195 200

<210> 6104

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6104

Ser Leu Lys Val Ile Thr Leu Ser Asn Pro Leu Asp Ala His His Leu
 1 5 10 15
 Phe Trp Ala Lys Gly Lys Ser Thr Asp Ile Val Lys Thr Thr Pro Ser
 20 25 30
 Ser Ala Glu Ala Ser Ser Leu Asn Phe Arg Val
 35 40

<210> 6105

<211> 337

<212> PRT

<213> S.epidermidis

<400> 6105

Leu Phe Arg Val Asn Ser Tyr Tyr Gln Ser Arg Met Asp Thr Phe Leu
 1 5 10 15
 Asn Arg Lys Gly Tyr Phe Met Ser Glu Glu Asn Thr Ile Met Glu Arg
 20 25 30
 Leu Phe His Lys Leu Asp Asp Lys Ala Lys Thr Leu Asn Lys Glu Asn
 35 40 45
 Gly Gln Ser Phe Ile Glu Asn Leu Gly Leu Ala Met Glu Asp Ile Tyr
 50 55 60

Thr Asn Gln Arg Glu Leu Leu Glu Gln Ala Thr Leu Gln Asp Arg Arg
 65 70 75 80
 Lys Ala Phe Gln Phe Ala Tyr Leu Ser Leu Leu Gln Glu Glu Asn Ile
 85 90 95
 Gln Ala Asn His Gln Ile Thr Pro Asp Ser Ile Gly Leu Ile Leu Gly
 100 105 110
 Phe Leu Val Gln Arg Phe Leu Glu His Lys Lys Glu Met His Ile Val
 115 120 125
 Asp Ile Ala Ser Gly Ala Gly His Leu Ser Ala Ala Val Lys Glu Val
 130 135 140
 Leu Ser Asp Lys Thr Ile Met His His Leu Ile Glu Val Asp Pro Val
 145 150 155 160
 Leu Ser Arg Val Ser Val His Leu Ala Asn Phe Leu Glu Ile Pro Phe
 165 170 175
 Asp Val Tyr Pro Gln Asp Ala Ile Met Pro Leu Pro Leu Glu Glu Ala
 180 185 190
 Asp Val Val Ile Gly Asp Phe Pro Ile Gly Tyr Tyr Pro Leu Asp Glu
 195 200 205
 Arg Ser Arg Glu Met Lys Leu Gly Phe Glu Lys Gly His Ser Tyr Ser
 210 215 220
 His His Leu Leu Ile Glu Gln Ser Ile Asn Ala Leu Lys Gly Ala Gly
 225 230 235 240
 Tyr Ala Phe Leu Val Val Pro Ser His Leu Phe Glu Asp Asp Lys Val
 245 250 255
 Lys Gln Leu Glu Asn Phe Ile Ala Thr Glu Thr Glu Met Gln Ala Phe
 260 265 270
 Leu Asn Leu Pro Lys Thr Leu Phe Lys Asn Glu Lys Ala Arg Lys Ser
 275 280 285
 Ile Leu Ile Leu Gln Lys Lys Ser Gly Glu Thr Arg Pro Val Glu
 290 295 300
 Val Leu Leu Ala Asn Ile Pro Asp Phe Lys Asn Pro Gln Gln Phe Gln
 305 310 315 320
 Gly Phe Ile Ser Glu Leu Asn Gln Trp Ile Val Thr Asn His Thr Lys
 325 330 335
 Lys

<210> 6106

<211> 121

<212> PRT

<213> S.epidermidis

<400> 6106

Leu Lys Gly Val Gln Arg Leu Met Ala Val Asn Leu Tyr Asp Tyr Ala
 1 5 10 15
 Asn Gln Leu Glu Gln Ala Leu Arg Asp Ser Asp Glu Tyr Lys Ala Ile
 20 25 30
 Lys Asp Ala Phe Ala Lys Val Lys Glu Asn Glu Glu Ser Lys Lys Leu
 35 40 45
 Phe Asp Glu Phe Arg Glu Thr Gln Met Ser Phe Gln Gln Lys Gln Met
 50 55 60
 Gln Gly Glu Glu Ile Pro Glu Glu Asp Leu Gln Lys Ala Gln Glu Gln
 65 70 75 80
 Ala Gln Ala Ile Glu Lys Asp Glu Asn Ile Ser Glu Leu Met Asn Ala
 85 90 95
 Glu Gln Lys Met Ser Gln Val Phe Gln Glu Ile Asn Gln Ile Ile Val

100
 Lys Pro Leu Asp Glu Ile Tyr Ala Asp
 115 120

<210> 6107
 <211> 1067
 <212> PRT
 <213> S.epidermidis

<400> 6107
 Glu Thr Met Val Ala His Leu Asn Ile His Thr Ser Phe Asp Leu Leu
 1 5 10 15
 Asp Ser Ser Leu Arg Ile Asp Ala Leu Ile Asp Lys Ala Lys Lys Glu
 20 25 30
 Gly Tyr Arg Ala Leu Ala Ile Thr Asp Thr Asn Val Leu Tyr Gly Tyr
 35 40 45
 Pro Lys Phe Tyr Asp Ala Cys Ile Ala Ala His Ile His Pro Ile Phe
 50 55 60
 Gly Met Thr Ile Tyr Leu Thr Asp Gly Leu Tyr Thr Ile Glu Thr Val
 65 70 75 80
 Val Leu Ala Lys Asn Asn Gln Gly Leu Lys Ser Leu Tyr Gln Ile Ser
 85 90 95
 Ser Ala Ile Met Met Arg Asn Lys Glu Glu Val Pro Ile Glu Trp Leu
 100 105 110
 Lys Arg Tyr Asp Glu His Leu Ile Ile Ile Phe Lys Glu Ala Glu Leu
 115 120 125
 Ser His Lys Gln Ile Ile Asp Ala Phe Glu Gly Lys Lys Glu Leu Tyr
 130 135 140
 Leu Asn His Asn Ser Asn Asn Thr Leu Thr Gly Lys Arg Val Trp Met
 145 150 155 160
 Gln Ser Ala Arg Tyr Leu Asn Glu Asp Asp Ala Glu Thr Ile Pro Ala
 165 170 175
 Leu His Ala Ile Arg Asp Asn Thr Lys Leu Asp Leu Ile His Glu Lys
 180 185 190
 Glu Thr Leu Asp Glu His Phe Pro Ser Ile Glu Glu Leu Gln Thr Leu
 195 200 205
 Asn Leu Ser Glu Asp Met Ile Thr Asn Ala Asn Glu Ile Glu Glu Leu
 210 215 220
 Cys Gln Ala Glu Ile Ala Tyr His Gln Ser Leu Leu Pro Gln Phe Val
 225 230 235 240
 Thr Pro Asn Gly Glu Thr Ser Lys Asp Tyr Leu Trp Thr Ile Leu Ile
 245 250 255
 His Arg Leu Arg Glu Trp Glu Leu Asn Asp Lys Thr Tyr Phe Asn Arg
 260 265 270
 Leu Lys His Glu Tyr Lys Ile Ile Thr Asp Met Gly Phe Glu Asp Tyr
 275 280 285
 Phe Leu Ile Val Ser Asp Leu Ile His Phe Ala Lys Thr His Glu Val
 290 295 300
 Met Val Gly Pro Gly Arg Gly Ser Ser Ala Gly Ser Leu Val Ser Tyr
 305 310 315 320
 Leu Leu Gly Ile Thr Thr Ile Asp Pro Leu Lys Tyr Asn Leu Leu Phe
 325 330 335
 Glu Arg Phe Leu Asn Pro Glu Arg Val Thr Met Pro Asp Ile Asp Ile
 340 345 350
 Asp Phe Glu Asp Thr Arg Arg Glu Lys Val Ile Lys Tyr Val Gln Asp
 355 360 365

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 115
 120
 130
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 160
 170
 180
 190
 200
 210
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Lys Tyr Gly Glu His His Val Ser Gly Ile Val Thr Phe Gly His Leu
 370 375 380
 Leu Ala Arg Ala Val Ala Arg Asp Val Gly Arg Ile Met Gly Phe Asp
 385 390 395 400
 Glu Thr Ser Leu Asn Glu Ile Ser Lys Leu Ile Pro His Lys Leu Gly
 405 410 415
 Ile Thr Leu Glu Glu Ala Tyr Gln Lys Pro Glu Phe Lys Ala Phe Val
 420 425 430
 His Arg Asn His Arg Asn Glu Arg Trp Phe Glu Val Ser Lys Lys Leu
 435 440 445
 Glu Gly Leu Pro Arg His Thr Ser Thr His Ala Ala Gly Ile Ile Ile
 450 455 460
 Asn Asp Gln Pro Leu Phe Lys Phe Ala Pro Leu Thr Thr Gly Asp, Thr
 465 470 475 480
 Gly Leu Leu Thr Gln Trp Thr Met Thr Glu Ala Glu Arg Ile Gly Leu
 485 490 495
 Leu Lys Ile Asp Phe Leu Gly Leu Arg Asn Leu Ser Ile Ile His Gln
 500 505 510
 Ile Ile Leu Gln Val Lys Lys Asp Leu Asn Ile Asn Ile Asp Ile Glu
 515 520 525
 Ala Ile Pro Tyr Asp Asp Lys Lys Val Phe Asp Leu Leu Ser Asn Gly
 530 535 540
 Asp Thr Thr Gly Ile Phe Gln Leu Glu Ser Asp Gly Val Arg Ser Val
 545 550 555 560
 Leu Lys Arg Leu Gln Pro Glu His Phe Glu Asp Ile Val Ala Val Thr
 565 570 575
 Ser Leu Tyr Arg Pro Gly Pro Met Glu Glu Ile Pro Thr Tyr Ile Thr
 580 585 590
 Arg Arg His Asn Pro Asn Gln Val Ala Tyr Leu His Pro Asp Leu Glu
 595 600 605
 Pro Ile Leu Lys Asn Thr Tyr Gly Val Ile Ile Tyr Gln Glu Gln Ile
 610 615 620
 Met Leu Ile Ala Ser Gln Val Ala Gly Phe Ser Tyr Gly Glu Ala Asp
 625 630 635 640
 Ile Leu Arg Arg Ala Met Ser Lys Lys Asn Arg Ala Ile Leu Glu Ser
 645 650 655
 Glu Arg Gln His Phe Ile Asp Gly Ala Lys Asn Asn Gly Tyr Gly Glu
 660 665 670
 Gln Ile Ser Lys Gln Ile Phe Asp Leu Ile Leu Lys Phe Ala Asp Tyr
 675 680 685
 Gly Phe Pro Arg Ala His Ala Val Ser Tyr Ser Lys Ile Ala Tyr Ile
 690 695 700
 Met Ser Tyr Leu Lys Val His Tyr Pro His Tyr Phe Tyr Ala Asn Ile
 705 710 715 720
 Leu Ser Asn Val Ile Gly Ser Glu Lys Lys Thr Ala Ala Met Ile Asp
 725 730 735
 Glu Ala Lys His Gln Arg Ile Ser Ile Leu Pro Pro Asn Ile Asn Gln
 740 745 750
 Ser His Trp Tyr Tyr Lys Ala Ser Asn Lys Gly Ile Tyr Leu Ser Leu
 755 760 765
 Gly Thr Ile Lys Gly Ile Gly Tyr Gln Ser Val Lys Leu Ile Ile Asp
 770 775 780
 Glu Arg Gln Gln Asn Gly Pro Tyr Arg Asp Phe Phe Asp Phe Ser Arg
 785 790 795 800
 Arg Ile Pro Lys Arg Val Lys Asn Arg Lys Leu Leu Glu Ser Leu Ile
 805 810 815

Leu Val Gly Ala Phe Asp Thr Phe Gly Lys Thr Arg Ala Thr Leu Leu
 820 825 830
 Gln Ala Ile Asp Gln Val Leu Asp Leu Asn Ser Asp Val Glu Gln Asp
 835 840 845
 Glu Met Leu Phe Asp Leu Leu Thr Pro Lys Gln Ser Tyr Glu Glu Lys
 850 855 860
 Glu Glu Leu Pro Asp Gln Leu Leu Ser Asp Tyr Glu Lys Glu Tyr Leu
 865 870 875 880
 Gly Phe Tyr Ile Ser Lys His Pro Val Glu Lys Lys Phe Glu Lys Lys
 885 890 895
 Gln Tyr Leu Gly Ile Phe Gln Leu Ser Asn Gly Ser His Tyr Gln Pro
 900 905 910
 Ile Leu Val Gln Phe Asp His Ile Lys Gln Ile Arg Thr Lys Asn Gly
 915 920 925
 Gln Asn Met Ala Phe Val Thr Met Asn Asp Gly Arg Thr Met Met Asp
 930 935 940
 Gly Val Ile Phe Pro Asp Lys Phe Lys Lys Tyr Glu Thr Ser Ile Ser
 945 950 955 960
 Lys Glu Gln Met Tyr Ile Val Leu Gly Lys Phe Glu Lys Arg Asn Gln
 965 970 975
 Gln Met Gln Leu Ile Ile Asn Gln Leu Phe Glu Val Glu Ala Tyr Glu
 980 985 990
 Gln Thr Lys Leu Ser Asn Ser Lys Lys Val Ile Leu Arg Asn Val Thr
 995 1000 1005
 His Leu Glu Pro Gln Phe Glu His Ser Lys Val Glu Ser Asn Glu Gln
 1010 1015 1020
 His Ala Leu Asn Ile Tyr Gly Phe Asp Glu Ser Ala Asn Lys Met Thr
 1025 1030 1035 1040
 Met Leu Gly Gln Ile Glu Arg Gln Arg Gln Asn Phe Asp Leu Leu Ile
 1045 1050 1055
 Gln Thr Tyr Ser Pro Ala Asp Ile Arg Phe Ile
 1060 1065

<210> 6108

<211> 428

<212> PRT

<213> S.epidermidis

<400> 6108

Asn Met Glu Val Asn Cys Met Ser Ala Glu Lys Ile Thr Gln Ser Lys
 1 5 10 15
 Asp Gly Leu Asn Val Pro Asn Glu Pro Ile Ile Pro Phe Ile Ile Gly
 20 25 30
 Asp Gly Ile Gly Pro Asp Ile Trp Lys Ala Ala Ser Arg Val Ile Asp
 35 40 45
 Ala Ala Val Glu Lys Ala Tyr Asn Gly Glu Lys Arg Ile Glu Trp Lys
 50 55 60
 Glu Val Leu Ala Gly Gln Lys Ala Tyr Asp Glu Thr Gly Glu Trp Leu
 65 70 75 80
 Pro Gln Glu Thr Leu Glu Thr Ile Lys Glu Tyr Leu Ile Ala Val Lys
 85 90 95
 Gly Pro Leu Thr Thr Pro Ile Gly Gly Gly Ile Arg Ser Leu Asn Val
 100 105 110
 Ala Leu Arg Gln Glu Leu Asp Leu Phe Thr Cys Leu Arg Pro Val Arg
 115 120 125
 Trp Phe Lys Gly Val Pro Ser Pro Val Lys Arg Pro Glu Asp Val Asp

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      130                      135                      140
Met Val Ile Phe Arg Glu Asn Thr Glu Asp Ile Tyr Ala Gly Ile Glu
145                      150                      155                      160
Phe Lys Gln Gly Thr Ser Glu Val Lys Lys Val Ile Asp Phe Leu Gln
      165                      170                      175
Asn Glu Met Gly Ala Thr Asn Ile Arg Phe Pro Glu Thr Ser Gly Ile
      180                      185                      190
Gly Ile Lys Pro Val Ser Lys Glu Gly Thr Glu Arg Leu Val Arg Ala
      195                      200                      205
Ala Ile Gln Tyr Ala Leu Asp Asn Asn Arg Lys Ser Val Thr Leu Val
      210                      215                      220
His Lys Gly Asn Ile Met Lys Phe Thr Glu Gly Ser Phe Lys Gln Trp
225                      230                      235                      240
Gly Tyr Asp Leu Ala His Asn Glu Phe Gly Asp Lys Val Phe Thr Trp
      245                      250                      255
Gln Gln Tyr Asp Glu Ile Val Glu Gln Lys Gly Lys Asp Ala Ala Asn
      260                      265                      270
Glu Ala Gln Ser Lys Ala Glu Gln Glu Gly Lys Ile Ile Ile Lys Asp
      275                      280                      285
Ser Ile Ala Asp Ile Phe Leu Gln Gln Ile Leu Thr Arg Pro Ala Glu
      290                      295                      300
His Asp Val Val Ala Thr Met Asn Leu Asn Gly Asp Tyr Ile Ser Asp
305                      310                      315                      320
Ala Leu Ala Ala Gln Val Gly Gly Ile Gly Ile Ala Pro Gly Ala Asn
      325                      330                      335
Ile Asn Tyr Glu Thr Gly His Ala Ile Phe Glu Ala Thr His Gly Thr
      340                      345                      350
Ala Pro Lys Tyr Ala Asp Leu Asn Lys Val Asn Pro Ser Ser Glu Ile
      355                      360                      365
Leu Ser Ser Val Leu Met Leu Glu His Leu Gly Trp Gln Lys Ala Ala
      370                      375                      380
Asp Lys Ile Thr Asp Ser Ile Glu Ala Thr Ile Ala Ser Lys Ile Val
385                      390                      395                      400
Thr Tyr Asp Phe Ala Arg Leu Met Asp Gly Ala Lys Glu Val Ser Thr
      405                      410                      415
Ser Asp Phe Ala Asp Glu Leu Ile Lys Asn Ile Arg
      420                      425

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<210> 6109

<211> 152

<212> PRT

<213> S.epidermidis

<400> 6109

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Met Asn Leu Phe Tyr Asn Pro Lys Gly Val Gly Asp Val Ala Phe Ile
1      5      10      15
Gln Ile Glu Pro Ser Val Gly Pro Phe Glu Tyr Glu Gln Lys His Gly
      20      25      30
Val Val Glu Ile Lys Lys Glu Asn Glu Val Val Gly Tyr Asn Ile Phe
      35      40      45
Asn Val Ser Asn Asn Val Thr Ile Asn Asp Asn Gly His Ile Lys Leu
      50      55      60
Thr Thr Glu Leu Ile Lys Asp Leu Gln Gln Leu Ile Thr Glu Ala Gly
65      70      75      80
Phe Asp Tyr Gln Leu Asp Thr Asp Val Ser Pro Lys Phe Val Val Gly
      85      90      95

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Tyr Val Glu Thr Lys Glu Lys His Pro Asn Ala Asp Lys Leu Ser Val
 100 105 110
 Leu Asn Val Asn Val Gly Thr Glu Lys Leu Gln Ile Val Cys Gly Ala
 115 120 125
 Pro Asn Val Glu Ser Gly Gln Lys Val Val Val Ala Lys Ser Trp Gly
 130 135 140
 Arg Tyr Ala Lys Arg Asn Gly Asn
 145 150

<210> 6110

<211> 243

<212> PRT

<213> S.epidermidis

<400> 6110

Gly Ile Leu Leu Lys Asp Ile Thr Phe Arg Arg Val Thr Leu Met Lys
 1 5 10 15
 Leu Ser Phe His Gly Gln Ser Thr Ile Tyr Phe Glu Gly Asn Gly Lys
 20 25 30
 Lys Val Ile Val Asp Pro Phe Ile Ser Gly Asn Asp Lys Cys Asp Leu
 35 40 45
 Asp Glu Gln Thr Leu Glu Val Asp Tyr Ile Ile Leu Thr His Gly His
 50 55 60
 Ala Asp His Phe Gly Asp Val Val Glu Leu Ala Asn Arg Asn His Ala
 65 70 75 80
 Thr Val Ile Gly Ser Ala Glu Leu Gln Gly Tyr Leu Ser Thr Tyr His
 85 90 95
 Gly Val Glu Asn Val His Gly Met Asn Ile Gly Gly Lys Ala Lys Phe
 100 105 110
 Asp Phe Gly Thr Val Lys Phe Val Gln Ala Phe His Ser Ser Ser Phe
 115 120 125
 Thr His Asp Asn Gly Val Pro Val Tyr Leu Gly Met Pro Met Gly Ile
 130 135 140
 Ile Val Glu Ala Glu Gly Lys Thr Ile Tyr His Thr Gly Asp Thr Gly
 145 150 155 160
 Leu Phe Ser Asp Met Lys Leu Ile Ala Asp Arg His Pro Val Asp Val
 165 170 175
 Cys Phe Val Pro Ile Gly Asp Asn Phe Thr Met Gly Ile Glu Asp Ala
 180 185 190
 Ser Tyr Ala Ile Asn Glu Phe Ile Lys Pro Thr Ile Ser Val Pro Ile
 195 200 205
 His Tyr Asn Thr Phe Pro Leu Ile Glu Gln Asp Pro Glu Gln Phe Lys
 210 215 220
 Asp Ala Val Gln Val Gly Glu Val Gln Ile Leu Lys Pro Gly Glu Ser
 225 230 235 240
 Val Glu Phe

<210> 6111

<211> 148

<212> PRT

<213> S.epidermidis

<400> 6111

Ser Cys Ile Phe Leu Val Ile Leu Gly Met Lys Tyr Tyr Tyr Asn Tyr
 1 5 10 15

Pro Thr Asn Lys Val Arg Arg Ile Ile Met Lys Val Ser Arg Ile Leu
 20 25 30
 Phe Gly Leu Gly Val Gly Ala Val Ala Gly Phe Ala Val Ala Leu Arg
 35 40 45
 His Arg Asp Asn Gln Ser Val Lys Asn His Thr Ile Asp Ala Ser Gln
 50 55 60
 Pro Thr Gly Ala Gln Ser Glu Leu Gln Arg Glu Ile Glu Asn Met Lys
 65 70 75 80
 Gln Ser Phe Asn Asp Ile Leu Asn Tyr Gly Ser Gln Ile Lys Asn Glu
 85 90 95
 Ser Ile Glu Phe Gly Ser Ser Ile Gly Glu Glu Phe Lys Gly Leu Ile
 100 105 110
 Gly Asn Phe Lys Ser Asp Ile Asn Pro Asn Ile Glu Lys Leu Gln Ser
 115 120 125
 His Ile Glu Asn Leu Gln Asn Arg Gly Glu Asp Ile Ser Asn Asn Leu
 130 135 140
 Ser Asn Asp Lys
 145

<210> 6112

<211> 293

<212> PRT

<213> S.epidermidis

<400> 6112

Gln Arg Ile Phe Gly Gly Leu Pro Met Phe Lys Asp Phe Phe Asn Arg
 1 5 10 15
 Ser Lys Lys Lys Lys Tyr Leu Thr Val Gln Asp Ser Lys Gln Asn Asp
 20 25 30
 Val Pro Ala Gly Ile Met Thr Lys Cys Pro Lys Cys Lys Lys Ile Met
 35 40 45
 Tyr Thr Lys Glu Leu Asn Glu Asn Leu Asn Val Cys Phe Asn Cys Asp
 50 55 60
 His His Ile Ala Leu Thr Ala Tyr Lys Arg Ile Glu Ala Ile Ser Asp
 65 70 75 80
 Glu Gly Ser Phe Ile Glu Phe Asp Arg Gly Met Thr Ser Ala Asn Pro
 85 90 95
 Leu Asp Phe Pro Gly Tyr Glu Glu Lys Ile Glu Lys Asp Gln Gln Lys
 100 105 110
 Thr Gly Leu Asn Glu Ala Leu Val Ser Gly Thr Ala Lys Leu Asp Gly
 115 120 125
 Ile Gln Tyr Gly Val Ala Val Met Asp Ala Arg Phe Arg Met Gly Ser
 130 135 140
 Met Gly Ser Val Val Gly Glu Lys Ile Cys Arg Ile Ile Asp Tyr Cys
 145 150 155 160
 Thr Glu His Arg Leu Pro Phe Ile Leu Phe Ser Ala Ser Gly Gly Ala
 165 170 175
 Arg Met Gln Glu Gly Ile Ile Ser Leu Met Gln Met Gly Lys Thr Ser
 180 185 190
 Val Ser Leu Lys Arg His Ser Asp Ala Gly Leu Leu Tyr Ile Ser Tyr
 195 200 205
 Ile Thr Asn Pro Thr Thr Gly Gly Val Ser Ala Ser Phe Ala Ser Val
 210 215 220
 Gly Asp Ile Asn Leu Ser Glu Pro Lys Ala Leu Ile Gly Phe Ala Gly
 225 230 235 240
 Arg Arg Val Ile Glu Gln Thr Ile Asn Glu Lys Leu Pro Asp Asp Phe

				245					250				255			
Gln	Thr	Ala	Glu	Phe	Leu	Leu	Glu	His	Gly	Gln	Leu	Asp	Lys	Val	Ile	
			260					265					270			
His	Arg	Lys	Asp	Met	Arg	Glu	Thr	Leu	Ser	Asn	Ile	Leu	Lys	Ile	His	
		275					280					285				
Gln	Glu	Val	Ser	Asn												
	290															

<210> 6113

<211> 369

<212> PRT

<213> S.epidermidis

<400> 6113

Lys	Tyr	Ser	Leu	Ser	Val	Gln	Thr	Leu	Tyr	Val	Asn	Ala	Phe	Leu	Asn	
1				5					10					15		
Leu	Ile	Phe	Met	Ile	His	Tyr	Leu	Lys	Ile	Ser	Tyr	Ser	Ser	Ile	Thr	
			20					25					30			
Glu	Val	Leu	His	Met	Ser	Leu	Phe	Lys	Asp	Phe	Phe	Ile	Ala	Leu	Ser	
		35					40					45				
Asn	His	Thr	Tyr	Leu	Asn	Lys	Ile	Ala	Lys	Lys	Met	Gly	Pro	Gln	Met	
	50					55					60					
Gly	Ala	Asn	Arg	Val	Val	Ala	Gly	Asn	Thr	Ile	His	Gln	Leu	Ile	Glu	
65					70					75				80		
Thr	Ile	Gln	Tyr	Leu	Asn	Asp	Tyr	Asn	Ile	Ser	Val	Thr	Val	Asp	Ser	
			85					90						95		
Leu	Gly	Glu	Phe	Val	Asn	Thr	Arg	Glu	Glu	Ser	Ile	Lys	Ala	Lys	Glu	
		100						105					110			
Glu	Ile	Leu	Glu	Ile	Ile	Asp	Ala	Ile	Tyr	Asn	Asn	Asn	Val	Lys	Ala	
		115					120					125				
His	Met	Ser	Val	Lys	Ile	Ser	Gln	Leu	Gly	Ser	Glu	Phe	Asp	Leu	Asn	
	130					135					140					
Leu	Ala	Tyr	Glu	Asn	Met	Arg	Glu	Ile	Leu	Leu	Lys	Ala	Asp	Lys	Asn	
145					150					155				160		
Gly	Lys	Met	His	Ile	Asn	Ile	Asp	Thr	Glu	Lys	Tyr	Asp	Ser	Leu	Ser	
			165					170						175		
Lys	Ile	Gln	His	Ile	Ile	Asp	Arg	Leu	Lys	Gly	Glu	Phe	Lys	Asn	Val	
		180						185					190			
Gly	Thr	Val	Val	Gln	Ala	Tyr	Leu	Tyr	Glu	Ala	Asp	Asp	Ile	Ile	Asp	
	195					200						205				
Lys	Tyr	Pro	Glu	Leu	Arg	Leu	Arg	Leu	Val	Lys	Gly	Ala	Tyr	Lys	Glu	
	210					215					220					
Asp	Ala	Ser	Ile	Ala	Phe	Gln	Ser	Lys	Lys	Glu	Ile	Asp	Ala	Asn	Tyr	
225					230					235				240		
Ile	Arg	Ile	Ile	Lys	Lys	Arg	Leu	Leu	Asn	Ser	Lys	Asn	Phe	Thr	Ser	
			245						250					255		
Val	Ala	Thr	His	Asp	Asn	Glu	Ile	Ile	Asn	Gln	Val	Lys	Gln	Phe	Met	
		260						265					270			
Lys	Glu	Asn	His	Ile	Ser	Lys	Asp	Lys	Met	Glu	Phe	Gln	Met	Leu	Tyr	
	275						280					285				
Gly	Phe	Arg	Thr	Glu	Leu	Ala	Gln	Lys	Ile	Ala	Asn	Glu	Gly	Tyr	Phe	
	290					295					300					
Phe	Thr	Val	Tyr	Val	Pro	Tyr	Gly	Asn	Asp	Trp	Phe	Ala	Tyr	Phe	Met	
305					310					315				320		
Arg	Arg	Leu	Ala	Glu	Arg	Pro	Gln	Asn	Leu	Ser	Leu	Ala	Ile	Lys	Glu	
				325					330					335		

6113
 369
 PRT
 S.epidermidis
 6113

<400>	6115															
Gly 1	Asp	Gln	Leu	Ser 5	Arg	Phe	Met	Asp	Asp 10	Ala	Ile	Gln	Leu	Ala 15	Lys	
Met	Val	Asn	Gly 20	Gln	Thr	Gly	Val	Asn 25	Pro	Pro	Val	Gly	Ser 30	Val	Val	
Val	Lys	Asn 35	Gly	Arg	Ile	Val	Gly 40	Leu	Gly	Ala	His	Leu 45	Lys	Lys	Gly	
Asp	Lys 50	His	Ala	Glu	Val	Gln 55	Ala	Ile	Glu	Met	Ala 60	Gly	Leu	Asn	Thr	
Gln 65	Gly	Ala	Thr	Ile	Tyr 70	Val	Ser	Leu	Glu	Pro 75	Cys	Thr	His	His	Gly 80	
Ser	Thr	Pro	Pro	Cys 85	Val	Asp	Lys	Ile	Ile 90	Glu	Ala	Gly	Ile	Ser 95	Lys	
Val	Ile	Tyr	Ala 100	Val	Lys	Asp	Thr	Thr 105	Leu	Val	Ser	Lys	Gly 110	Asp	Glu	
Ile	Leu	Arg 115	Glu	Ala	Gly	Ile	Glu	Val 120	Glu	Phe	Gln	Tyr 125	Asn	Glu	Asn	
Ala	Ala 130	Ala	Leu	Tyr	Arg	Asp 135	Phe	Phe	Thr	Ala	Lys 140	Arg	Asn	Glu	Val	
Pro 145	Glu	Val	Thr	Val	Lys 150	Val	Ser	Ser	Ser	Leu	Asp 155	Gly	Lys	Gln	Ala 160	
Thr	Asp	Phe	Asn	Glu 165	Ser	Lys	Trp	Ile	Thr 170	Asn	Lys	Glu	Val	Lys 175	Glu	
Asp	Val	Tyr	Gln 180	Leu	Arg	His	Glu	His 185	Asp	Ala	Val	Ile	Thr 190	Gly	Arg	
Arg	Thr	Ile 195	Glu	Ala	Asp	Asn	Pro 200	Leu	Tyr	Thr	Thr	Arg 205	Val	Pro	Asp	
Gly	Lys 210	His	Pro	Ile	Arg	Val 215	Ile	Leu	Ser	Lys	Lys 220	Gly	Gln	Leu	Asp	
Phe 225	Asn	Gln	Gln	Ile	Phe 230	Lys	Asp	Thr	Ala	Ser 235	Glu	Ile	Trp	Ile	Tyr 240	

Thr Glu Asn Glu Lys Leu Lys Thr Asn Lys Ser Phe Ile Lys Ile Ile
 245 250 255
 Asn Ile Ser Asn Cys Asp Thr Thr Thr Ile Leu Gln Asp Leu Tyr Gln
 260 265 270
 Arg Gly Ile Gly Lys Leu Leu Val Glu Ala Gly Pro Asn Ile Thr Ser
 275 280 285
 Gln Phe Leu Gln Ser Lys His Leu Asn Glu Leu Ile Leu Tyr Ile Ala
 290 295 300
 Pro Lys Leu Ile Gly Gly Ser Gly Lys His Gln Phe Tyr Lys Thr Asp
 305 310 315 320
 Glu Val Ile Asp Leu Pro Glu Ala Thr Gln Phe Glu Ile Val Asp Ser
 325 330 335
 Lys Leu Ile Asn Gln Asn Leu Lys Leu Lys Leu Arg Lys Lys
 340 345 350

<210> 6116

<211> 149

<212> PRT

<213> S.epidermidis

<400> 6116

Asn Ser Gln Phe Phe Ile Trp Glu Met Leu Ile Leu Ala Asn Ser Glu
 1 5 10 15
 Lys Asn Arg Val Tyr Gly Ile Leu Gln Leu Glu Thr Leu Phe Lys Glu
 20 25 30
 Ile Asp Ser Ile Phe Asn Thr Ile Lys Glu Glu Tyr Gly Met Ser Lys
 35 40 45
 Glu Glu Ile Leu Ile Leu Leu Thr Leu Leu Glu Lys Gly Ser Met Thr
 50 55 60
 Leu Lys Glu Met Asp Lys Tyr Val His Ile Lys Lys Pro Tyr Lys Arg Thr
 65 70 75 80
 Arg Thr Tyr Asn Asn Leu Val Asn Leu Glu Trp Ile Tyr Lys Glu Arg
 85 90 95
 Pro Gln Asp Asp Glu Arg Thr Val Ile Ile His Phe Asn Asp Lys Gln
 100 105 110
 Asn Ser Lys Lys Glu Asp Leu Leu Lys Phe Ile Asp Asp Ser Ile Lys
 115 120 125
 Ile Lys Ser Glu Pro Met Gln Ser Ser Leu Gln Ser Ile Leu Ala Val
 130 135 140
 Glu Phe Asn Val Leu
 145

<210> 6117

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6117

Lys Arg Gln Phe Leu Tyr Tyr Phe Asn Arg Asn Cys Leu Tyr Leu Leu
 1 5 10 15
 Ile Leu Asp Leu Leu Val Pro Val Ser Ile Leu Tyr Val Leu Lys Leu
 20 25 30
 Leu Asn Thr Asp Arg Lys Asp Ala Ile
 35 40

<210> 6118

<211> 56
 <212> PRT
 <213> S.epidermidis

<400> 6118
 Lys Pro Leu Ser Ser Asp Tyr Ser Met Thr Arg Lys Gly Gly Cys Asn
 1 5 10 15
 Tyr Ile Ile Asp Ser Asp Leu Ile Met His Ile Leu Phe Ile Asn Ile
 20 25 30
 Lys Asn Val Ala Ser Ile Leu Cys Lys Gly Phe Lys Lys Ser Val Leu
 35 40 45
 Tyr Ile Arg Ile Val Tyr Leu Val
 50 55

<210> 6119
 <211> 63
 <212> PRT
 <213> S.epidermidis

<400> 6119
 Met Asn Ser Ser Thr Ser Leu Phe Ser Met Asp Ala Tyr Ser Thr Met
 1 5 10 15
 Trp Met Ile Tyr Lys Ile Ser Trp Leu Lys Ser Ser His Ser Ile Lys
 20 25 30
 Leu Leu Lys Lys Tyr Phe Ile Phe His Met Ser Ala Tyr Tyr Ser Leu
 35 40 45
 Gln Asn Asn Tyr Tyr Lys Leu Ile Val Leu Lys Ala Phe Leu Ile
 50 55 60

<210> 6120
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 6120
 Val Leu Thr Ser Phe Ser Asn Asn Ser Ala Leu Tyr Ser Phe Phe Phe
 1 5 10 15
 Val Lys Lys Met Arg Glu Lys Ile Asn Ile Lys Lys Ala Val Glu Lys
 20 25 30
 Asn Asn Ile Val Ile Phe Leu Lys Leu Thr Asp Phe Ile Thr Asn Ser
 35 40 45
 Pro Leu Thr
 50

<210> 6121
 <211> 83
 <212> PRT
 <213> S.epidermidis

<400> 6121
 Leu Ile Ser Ser Leu Gly Lys Lys Met Gly Ser Asn Val Lys Asp Ser
 1 5 10 15
 Lys Ile Thr Pro Asn Lys Ile Ser Leu Phe Thr Gly Ser Leu Val Thr
 20 25 30
 Asn Glu Ile Thr Thr Ile Val Gln Tyr Lys Asn Met Glu Ser Ile Phe
 35 40 45

Phe Arg Phe Thr Arg Arg Leu Gly Ile Gly Cys Phe Leu Val Ala Ala
 50 55 60
 Gly Ala Tyr Lys Ile Val Ile Ile Asn Pro Thr Asn Ala Ile Asp Lys
 65 70 75 80
 Arg Thr Lys

<210> 6122
 <211> 71
 <212> PRT
 <213> S.epidermidis

<400> 6122
 Met Ser Leu Ser Asn Glu Glu Met Ile Ser Asn Ile Arg Gln Lys Leu
 1 5 10 15
 Asn Ile Val Asn Gln Ala Leu Leu Asn Pro Glu Lys Phe Lys Ser Thr
 20 25 30
 Pro His Gln Asp Ile Ser Glu Ile Tyr Glu Phe Val Met Ser Lys Asp
 35 40 45
 Ser Phe Ser Pro Ser Glu Val Thr Ala Ile Ala Asp His Leu Gly Gln
 50 55 60
 Leu Arg Gln Asp Met Glu Asp
 65 70

<210> 6123
 <211> 498
 <212> PRT
 <213> S.epidermidis

<400> 6123
 Ile Phe Lys Ser Ile Gly Asp Val Lys Val Tyr Gln Tyr Asn Asp Asp
 1 5 10 15
 Ser Leu Met Leu His Asn Asp Leu Tyr Gln Ile Asn Met Ala Glu Ser
 20 25 30
 Tyr Trp Asn Asp Gly Ile His Glu Arg Ile Ala Val Phe Asp Leu Tyr
 35 40 45
 Phe Arg Lys Met Pro Phe Asn Ser Gly Tyr Ala Val Phe Asn Gly Leu
 50 55 60
 Lys Arg Val Val Asn Phe Ile Glu Asn Phe Gly Phe Thr Asn Glu Asp
 65 70 75 80
 Ile Thr Tyr Leu Lys Ser Ile Gly Tyr Glu Glu Asp Phe Leu Asn Tyr
 85 90 95
 Leu Lys Asp Leu Lys Phe Thr Gly Asn Ile Lys Ser Met Gln Glu Gly
 100 105 110
 Glu Ile Cys Phe Gly Asn Glu Pro Leu Leu Arg Val Glu Ala Pro Leu
 115 120 125
 Ile Gln Ala Gln Leu Ile Glu Thr Ile Leu Leu Asn Ile Ile Asn Phe
 130 135 140
 Gln Thr Leu Ile Ala Thr Lys Ala Ser Arg Ile Arg Gln Ile Ala Thr
 145 150 155 160
 His Asp Thr Leu Met Glu Phe Gly Thr Arg Arg Ala Gln Glu Ile Asp
 165 170 175
 Ala Ala Leu Trp Gly Ala Arg Ala Ala Phe Ile Gly Gly Phe Asp Ser
 180 185 190
 Thr Ser Asn Val Arg Ala Gly Lys Leu Phe Asn Ile Pro Val Phe Gly
 195 200 205

Thr His Ala His Ala Leu Val Gln Thr Tyr Gly Asp Glu Tyr Ile Ala
 210 215 220
 Phe Lys Lys Tyr Ala Glu Arg His Lys Asn Cys Val Phe Leu Val Asp
 225 230 235 240
 Thr Phe His Thr Leu Lys Ser Gly Val Pro Thr Ala Ile Lys Val Ala
 245 250 255
 Lys Glu Leu Gly Asp Thr Ile Asn Phe Ile Gly Ile Arg Leu Asp Ser
 260 265 270
 Gly Asp Ile Ala Tyr Leu Ser Lys Glu Ala Arg Arg Met Leu Asp Glu
 275 280 285
 Ala Gly Phe Thr Glu Ala Lys Ile Ile Ala Ser Asn Asp Leu Asp Glu
 290 295 300
 Gln Thr Ile Thr Ser Leu Lys Ala Gln Gly Ala Lys Val Asp Gly Trp
 305 310 315 320
 Gly Val Gly Thr Lys Leu Ile Thr Gly Tyr Asp Gln Pro Ala Leu Gly
 325 330 335
 Ala Val Tyr Lys Leu Val Ser Ile Glu Thr Asp Asp Gly Thr Met Ser
 340 345 350
 Asp Arg Ile Lys Leu Ser Asn Asn Ala Glu Lys Val Thr Thr Pro Gly
 355 360 365
 Lys Lys Asn Val Tyr Arg Ile Ile Asn Asn Lys Thr Gly Lys Ala Glu
 370 375 380
 Gly Asp Tyr Ile Thr Leu Glu Gly Glu Asn Pro Asn Asp Glu Ser Pro
 385 390 395 400
 Leu Lys Met Phe His Pro Val His Thr Tyr Lys Met Lys Phe Ile Lys
 405 410 415
 Ser Phe Lys Ala Val Asn Leu His Gln Ser Ile Phe Glu Asn Gly Lys
 420 425 430
 Leu Val Tyr His Leu Pro Asp Glu Tyr Glu Ala Gln Asp Tyr Leu Lys
 435 440 445
 Asn Asn Leu Ser Ile Leu Trp Glu Glu Asn Lys Arg Tyr Leu Asn Pro
 450 455 460
 Gln Asp Tyr Pro Val Asp Leu Ser Thr Lys Cys Trp Glu Asn Lys His
 465 470 475 480
 Lys Arg Ile Phe Glu Val Ala Glu His Val Lys Glu Met Glu Asp Glu
 485 490 495
 Asn Glu

<210> 6124

<211> 252

<212> PRT

<213> S.epidermidis

<400> 6124

Arg Ser Ile Pro Leu Tyr Ile Ser Tyr Glu Cys Cys Ser Ile Glu Arg
 1 5 10 15
 Trp Arg Asn Met Thr Arg Lys Tyr Ile Ser Thr Glu Met Leu Ile Ile
 20 25 30
 Phe Thr Ala Leu Met Ile Ile Ala Asn Phe Tyr Tyr Ile Phe Phe Glu
 35 40 45
 Lys Ile Gly Phe Leu Leu Val Leu Leu Leu Gly Cys Val Leu Val Tyr
 50 55 60
 Val Gly Tyr Val Tyr Phe His Lys Val Arg Gly Leu Leu Ser Phe Trp
 65 70 75 80
 Ile Gly Thr Leu Leu Ile Ala Phe Thr Leu Leu Ser Asn Lys Tyr Thr

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<210> 6125
<211> 458
<212> PRT
<213> S.epidermidis
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Lys 1	Arg	Thr	Phe	Leu 5	Ile	Lys	Asn	Val	Ile 10	Met	Tyr	Ser	Phe	Cys 15	Arg
Ser	Tyr	Asn	Thr	Tyr	Asp	Arg	Ser	Leu	Gln	Arg	Met	Ile	Glu	Arg	Tyr
			20					25					30		
Ser	Arg	Asp	Glu	Met	Ser	Ser	Ile	Trp	Thr	Asp	Gln	Asn	Arg	Tyr	Glu
		35					40					45			
Ala	Trp	Leu	Glu	Val	Glu	Ile	Leu	Ala	Cys	Glu	Ala	Trp	Ser	Glu	Leu
	50					55					60				
Gly	Tyr	Ile	Pro	Lys	Glu	Asp	Val	Lys	Lys	Ile	Arg	Glu	Asn	Ala	Lys
65					70					75					80
Val	Asn	Val	Glu	Arg	Ala	Lys	Glu	Ile	Glu	Gln	Glu	Thr	Arg	His	Asp
				85					90					95	
Val	Val	Ala	Phe	Thr	Arg	Gln	Val	Ser	Glu	Thr	Leu	Gly	Asp	Glu	Arg
			100					105					110		
Lys	Trp	Val	His	Tyr	Gly	Leu	Thr	Ser	Thr	Asp	Val	Val	Asp	Thr	Ala
		115					120					125			
Leu	Ser	Tyr	Val	Ile	Lys	Gln	Ala	Asn	Glu	Ile	Leu	Glu	Lys	Asp	Leu
		130				135						140			
Glu	Arg	Phe	Ile	Asp	Val	Leu	Ala	Ala	Lys	Ala	Lys	Lys	Tyr	Gln	Tyr
145					150					155					160
Thr	Leu	Met	Met	Gly	Arg	Thr	His	Gly	Val	His	Ala	Glu	Pro	Thr	Thr
				165					170					175	
Phe	Gly	Val	Lys	Met	Ala	Leu	Trp	Tyr	Thr	Glu	Met	Lys	Arg	Asn	Leu
			180					185					190		
Lys	Arg	Phe	Lys	Glu	Val	Arg	Lys	Glu	Ile	Glu	Val	Gly	Lys	Met	Ser
		195					200					205			
Gly	Ala	Val	Gly	Thr	Phe	Ala	Asn	Ile	Pro	Pro	Glu	Ile	Glu	Ala	Tyr
		210				215					220				

Val Cys Glu His Leu Gly Ile Asp Thr Ala Ala Val Ser Thr Gln Thr
 225 230 235 240
 Leu Gln Arg Asp Arg His Ala Tyr Tyr Ile Ala Thr Leu Ala Leu Ile
 245 250 255
 Ala Thr Ser Met Glu Lys Phe Ala Val Glu Ile Arg Asn Leu Gln Lys
 260 265 270
 Thr Glu Thr Arg Glu Val Glu Glu Ala Phe Ala Lys Gly Gln Lys Gly
 275 280 285
 Ser Ser Ala Met Pro His Lys Arg Asn Pro Ile Gly Ser Glu Asn Ile
 290 295 300
 Thr Gly Ile Ser Arg Val Ile Arg Gly Tyr Ile Thr Thr Ala Tyr Glu
 305 310 315 320
 Asn Ile Pro Leu Trp His Glu Arg Asp Ile Ser His Ser Ser Ala Glu
 325 330 335
 Arg Ile Met Leu Pro Asp Val Thr Ile Ala Leu Asp Tyr Ala Leu Asn
 340 345 350
 Arg Phe Thr Asn Ile Val Asp Arg Leu Thr Val Tyr Glu Asp Asn Met
 355 360 365
 Arg Asn Asn Ile Asp Lys Thr Tyr Gly Leu Ile Phe Ser Gln Arg Val
 370 375 380
 Leu Leu Ala Leu Ile Asn Lys Gly Met Val Arg Glu Glu Ala Tyr Asp
 385 390 395 400
 Lys Val Gln Pro Lys Ala Met Glu Ser Trp Glu Thr Lys Thr Pro Phe
 405 410 415
 Arg Glu Leu Ile Glu Gln Asp Ser Ser Ile Thr Asp Val Leu Ser Ser
 420 425 430
 Glu Glu Leu Asp Asp Cys Phe Asp Pro Lys His His Leu Asn Gln Val
 435 440 445
 Asp Thr Ile Phe Ala Arg Ala Gly Leu Ser
 450 455

<210> 6126

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6126

Glu Leu Cys Pro Gly Leu Leu Phe Tyr Glu Ile Val Lys Asn Ile Val
 1 5 10 15
 Phe Thr Arg Ile Phe Thr Ile His Val Lys Leu Val Phe Leu Ile Lys
 20 25 30
 Ser Ala Asp Asn Phe Asn Leu Lys Ile Gln Ser Leu
 35 40

<210> 6127

<211> 168

<212> PRT

<213> S.epidermidis

<400> 6127

Leu Lys Met Leu Ser Lys Glu Leu Leu Ala Ala Leu Asn Glu Gln Met
 1 5 10 15
 Asn Gln Glu Tyr Phe Ala Ala His Ala Tyr Met Ala Met Ala Ala Tyr
 20 25 30
 Cys Asp Lys Glu Ser Tyr Asp Gly Phe Ala Asn Phe Tyr Ile Glu Gln
 35 40 45

Ala Lys Glu Glu Arg Phe His Gly Lys Lys Ile Tyr Asp Tyr Ile Asn
 50 55 60
 Asp Arg Gly Glu His Ala Ile Phe Asp Thr Ile Lys Ala Pro Lys Val
 65 70 75 80
 Glu Phe Ser Ser Ile Leu Glu Thr Phe Lys Asp Ser Leu Ala Gln Glu
 85 90 95
 Arg Asp Val Thr Gln Arg Phe Tyr Asn Leu Ser Glu Leu Ala Arg Asn
 100 105 110
 Asp Lys Asp Tyr Ala Thr Ile Ser Phe Leu Asn Trp Phe Leu Asp Glu
 115 120 125
 Gln Val Glu Glu Glu Ser Thr Phe Glu Thr His Ile Asp Tyr Leu Thr
 130 135 140
 Arg Ile Gly Asp Asp Cys Asn Thr Leu Tyr Leu Tyr Glu Lys Glu Leu
 145 150 155 160
 Ala Ala Arg Ser Phe Asn Glu Gln
 165

<210> 6128
 <211> 99
 <212> PRT
 <213> S.epidermidis

<400> 6128
 Gly Ser Ile Pro Pro Thr Pro Pro Arg Lys Leu Ala Leu Thr Phe Gln
 1 5 10 15
 Arg Leu Leu Pro Ile Leu Tyr Lys Leu Cys Arg Ile Ser Ile Ser Gly
 20 25 30
 Tyr Ser Lys Ala Pro Arg Gly Leu Ser Val Leu Ser Arg Val Thr Cys
 35 40 45
 Ile Phe Thr Gly Thr Met Ile Ser Pro Ser Leu Ser Leu Arg Gln Cys
 50 55 60
 Pro Asn Arg Tyr Ala Phe Arg Ala Gly Arg Asn Leu Pro Asp Lys Glu
 65 70 75 80
 Phe Arg Tyr Leu Arg Thr Val Ile Val Thr Ala Ala Val Tyr Trp Gly
 85 90 95
 Phe Asp Ser

<210> 6129
 <211> 59
 <212> PRT
 <213> S.epidermidis

<400> 6129
 His Tyr Tyr Pro Ser Phe Ser Leu Arg Arg Ile Leu Ile Met Glu Asn
 1 5 10 15
 Ile Phe Asn Leu Phe Ile Lys Phe Phe Thr Thr Ile Leu Glu Phe Ile
 20 25 30
 Gly Thr Val Ala Gly Asp Ser Val Cys Ala Ser Tyr Phe Asp Glu Pro
 35 40 45
 Glu Val Pro Glu Glu Leu Thr Lys Leu Tyr Glu
 50 55

<210> 6130
 <211> 116
 <212> PRT

6128 6129 6130

<213> S.epidermidis

<400> 6130

Ala Ile Ile Pro His Met Thr Pro Leu Ile Val Asn Gly Met Ala Ile
 1 5 10 15
 Ile Lys Cys Phe Lys Tyr Thr Gly Ile Ile Ile Leu Ala Ala Pro Met
 20 25 30
 Ser Asn Thr Thr Leu Thr Pro Arg Glu Leu Thr Leu Lys Asp Pro Asn
 35 40 45
 Lys Lys Val Thr Gln Ala Ala Thr Ile Pro Ile Phe Ala Ala Pro Leu
 50 55 60
 Pro Lys Pro Val Arg Leu Ile Ala Val Ala Ile Ala Thr Asn Glu Ile
 65 70 75 80
 Gly Val Thr Ile Asn Lys Glu Asn Val Thr Gln Ile Asn Ile Asp Ile
 85 90 95
 Asn Asn Gly Phe Asn Ser Val Asn Leu Phe Thr Asn Phe Pro Ser Asp
 100 105 110
 Cys Val Ile Thr
 115

<210> 6131

<211> 100

<212> PRT

<213> S.epidermidis

<400> 6131

Arg Leu Pro Pro Thr Tyr Tyr Arg Gly Cys Trp His Val Val Ser Arg
 1 5 10 15
 Gly Phe Leu Ile Arg Tyr Arg Gln Asp Val His Ser Tyr Leu His Ile
 20 25 30
 Cys Ser Ser Leu Ile Thr Glu Phe Tyr Asp Pro Lys Thr Phe Ile Thr
 35 40 45
 His Ala Ala Leu Leu Arg Gln Ala Phe Ala His Cys Gly Arg Phe Pro
 50 55 60
 Thr Ala Ala Ser Arg Arg Ser Leu Asp Arg Val Ser Val Pro Val Trp
 65 70 75 80
 Pro Ile Thr Leu Ser Gly Arg Leu Arg Ile Val Ala Leu Val Ser Arg
 85 90 95
 Tyr Leu Thr Asn
 100

<210> 6132

<211> 70

<212> PRT

<213> S.epidermidis

<400> 6132

Thr Leu Thr Phe Pro Lys Cys Ile Ser Lys Gly Ala Thr Tyr Lys Tyr
 1 5 10 15
 Arg Arg His Cys Phe Phe Ile Ser Thr His Pro Thr Phe His Ile Phe
 20 25 30
 Phe Ser Val Leu Glu Gly Asn Ala His His Phe Val His Asp Leu Leu
 35 40 45
 Leu Ile Asn His Arg His Lys Leu Phe Thr Ile Gln Ser Leu Thr Ala
 50 55 60
 Asn Thr Leu Lys Cys Pro

65

70

<210> 6133
 <211> 279
 <212> PRT
 <213> S.epidermidis

<400> 6133

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Pro Leu Phe Thr Ile Lys Tyr Ile Ile Tyr Ile Tyr Arg Trp Arg Glu
1          5          10          15
Lys Phe Phe Phe Leu Asn Leu Ala Gln Lys Thr Arg Phe Val Lys Leu
20          25          30
Arg Tyr Pro Leu Leu Thr Arg Phe Tyr Ser His Gly Leu Ala Gln Ile
35          40          45
Leu Pro Gly Leu Val Leu Gly Ser His Leu Leu Gly Asp Met Tyr Lys
50          55          60
Met Gln Thr Ala Gln Thr Met Ser Ile Met Gln Val Ser Ile Phe Ile
65          70          75          80
Ile Ala Ala Leu Leu Ile Ile Phe Met Gln Ala Thr Ile Lys Asn Pro
85          90          95
Thr Gln Leu Glu Gln Gly His Lys Glu Pro Lys Arg Tyr Ile Phe Ala
100         105         110
Trp Val Leu Leu Gly Phe Cys Ile Val Met Ile Tyr Gln Ile Ile Ile
115         120         125
Ser Ile Ile Leu Phe Ala Ile Asn Gly Ser Pro Gln Arg Ser Pro Asn
130         135         140
Thr Glu Arg Leu Met Ala Ile Ala Lys Gln Met Pro Ile Phe Ile Val
145         150         155         160
Leu Ile Ser Ile Val Gly Pro Ile Leu Glu Glu Tyr Val Phe Arg Lys
165         170         175
Val Ile Phe Gly Glu Leu Tyr Asn Phe Ile Lys Gly Ser Arg Val Val
180         185         190
Ser Phe Ile Ile Ala Ser Ile Val Ser Ser Leu Ile Phe Ala Leu Ala
195         200         205
His Asn Asp Phe Lys Phe Ile Pro Val Tyr Phe Gly Met Gly Val Ile
210         215         220
Phe Ser Leu Ala Tyr Val Tyr Thr Lys Arg Ile Ala Val Pro Ile Gly
225         230         235         240
Ile His Met Leu Met Asn Gly Ser Val Val Leu Thr Gln Val Val Gly
245         250         255
Gly Asp Ser Ile Lys Lys Leu Gln Glu Leu Lys Ala Pro Asn Ile Tyr
260         265         270
Ile Pro Ser Tyr Ile Leu Lys
275

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<210> 6134
 <211> 279
 <212> PRT
 <213> S.epidermidis

<400> 6134

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Lys Gly Glu Phe Glu Lys Arg Arg Lys Pro Met Lys Arg Ser Asp Lys
1          5          10          15
Tyr Thr Asp Asp Tyr Ile Glu Gln Arg Tyr Glu Ser Gln Arg Pro His
20          25          30
Tyr Asn Thr Tyr Tyr Gln Pro Ile Gly Lys Pro Pro Lys Lys Lys Lys

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35 40 45
 Ser Lys Arg Ile Phe Leu Lys Ala Ile Ile Thr Ile Leu Ile Leu Leu
 50 55 60
 Ile Ile Phe Phe Gly Val Met Tyr Phe Ile Ser Ser Arg Ala Asn Val
 65 70 75 80
 Asp Asp Leu Lys Ser Ile Glu Asn Lys Ser Asp Phe Val Ala Thr Glu
 85 90 95
 Asn Met Pro Asn Tyr Val Lys Gly Ala Phe Ile Ser Met Glu Asp Glu
 100 105 110
 Arg Phe Tyr Lys His His Gly Phe Asp Ile Lys Gly Thr Thr Arg Ala
 115 120 125
 Leu Phe Ser Thr Ile Ser Asp Arg Asp Val Gln Gly Gly Ser Thr Ile
 130 135 140
 Thr Gln Gln Val Val Lys Asn Tyr Tyr Tyr Asp Asn Glu Arg Ser Phe
 145 150 155 160
 Thr Arg Lys Ile Lys Glu Leu Phe Val Ala Arg Lys Val Glu Lys Gln
 165 170 175
 Tyr Ser Lys Asn Gln Ile Leu Ser Phe Tyr Met Asn Asn Ile Tyr Tyr
 180 185 190
 Gly Asp Asn Gln Tyr Thr Val Glu Gly Ala Ala Asn His Tyr Phe Gly
 195 200 205
 Val Thr Val Asp Lys Asn Asn Ser Asn Met Ser Gln Ile Ser Val Leu
 210 215 220
 Gln Ser Ala Ile Leu Ala Ser Lys Val Asn Ala Pro Ser Val Tyr Asp
 225 230 235 240
 Val Asn Asp Met Ser Asn Asn Tyr Ile Asn Arg Val Lys Thr Asn Leu
 245 250 255
 Glu Lys Met Lys Gln Gln Asn Phe Ile Ser Glu Ser Gln Tyr Gln Glu
 260 265 270
 Ala Met Ser Gln Leu Gly Asn
 275

<210> 6135
 <211> 384
 <212> PRT
 <213> S.epidermidis

<400> 6135
 Ile Val Tyr Thr Tyr Thr Ile Lys Ile Arg Asn Glu Ile Ile Met Lys
 1 5 10 15
 Ile Val Glu Val Lys Ser Lys Asn Gly Thr Asn Phe Met Ile Leu Asp
 20 25 30
 Gly Asn Asn Glu Pro Ile Val Asp Ala Val Arg Tyr Leu Lys Tyr Leu
 35 40 45
 Asp Ser Val Lys Lys Ser Leu Asn Thr Lys Lys Thr Tyr Ala Tyr Ala
 50 55 60
 Leu Lys Asn Phe Phe Val Tyr Leu Glu Ser Lys Lys Ile Cys Tyr Lys
 65 70 75 80
 Glu Val Ser Phe Asp Asn Phe Val Asp Phe Ile Arg Trp Met Lys Thr
 85 90 95
 Pro Phe Glu Tyr Glu Asn Val Leu Ser Tyr His Arg Lys Glu Lys Ser
 100 105 110
 Ile Ser Pro Lys Thr Ile Asn Leu Thr Met Thr Val Val Ser Asn Phe
 115 120 125
 Tyr Asp Tyr Leu Tyr Arg Ser Lys Lys Leu Asp Val Asn Phe Tyr Asp
 130 135 140

Phe Met His Met Glu Ser Lys Tyr Ser Lys Lys Tyr Lys Ser Phe Met
 145 150 155 160
 His His Ile Asn Lys Asp Tyr Arg Thr Leu Lys Asn Ile Leu Lys Val
 165 170 175
 Lys Glu Pro Lys Lys Lys Ile Glu Val Leu Thr Asn Ala Glu Val Lys
 180 185 190
 Lys Leu Leu Glu Glu Ala Asn Asn Ile Arg Asp Lys Phe Leu Ile Gln
 195 200 205
 Leu Leu Tyr Glu Thr Gly Leu Arg Ile Gly Glu Val Leu Ser Leu Arg
 210 215 220
 Ile Asp Asp Ile Lys Phe Asp Phe Arg Lys Gly His Gln Ile Val Leu
 225 230 235 240
 Lys Asn Arg Phe Asn Asp Asn Gly Thr Tyr Leu Lys Thr Gly Glu Arg
 245 250 255
 Lys Ile Phe Ile Ser Gln Ser Leu Ile Asp Leu Tyr Asp Asp Tyr Val
 260 265 270
 Tyr Glu Ile Ile Asp Glu Leu Ser Ile Cys Ser Asp Tyr Leu Phe Val
 275 280 285
 Lys Ile Lys Gly Arg Asn Val Gly Glu Ala Met Asn Tyr Ser Asp Ile
 290 295 300
 Tyr Ser Leu Phe Lys Arg Leu Lys His Lys Thr Ser Ile Asn Val His
 305 310 315 320
 Pro His Leu Phe Arg His Thr His Ala Thr Val Phe Tyr Asn Glu Thr
 325 330 335
 Lys Asp Ile Lys Gln Val Gln Glu Arg Leu Gly His Ser Asn Ile Gln
 340 345 350
 Thr Thr Ile Asn Leu Tyr Val His Pro Thr Glu Glu Asp Ile Arg Glu
 355 360 365
 Asp Trp Asn Lys Val Lys His Gln Phe Gln Val Phe Asn Lys Gly Glu
 370 375 380

<210> 6136

<211> 362

<212> PRT

<213> S.epidermidis

<400> 6136

Glu Ala His Thr Thr Met Lys Asp Asn Lys Pro Asn Asn Ser Lys Leu
 1 5 10 15
 Ile Gln Thr Tyr Leu Ser Lys Lys Thr Leu Arg Tyr Gly Thr Ala Ser
 20 25 30
 Ala Leu Thr Leu Ala Leu Tyr Leu Phe Asn Ser Asn Val Thr Val Tyr
 35 40 45
 Ala Asp Glu Asn Thr Ala Asn Gln Asn Gln Gly Thr Ser Pro Lys Ile
 50 55 60
 Ser Gln Thr Ala Pro Thr Asn Asn Thr Glu Asn Thr Asp Ala Thr Ala
 65 70 75 80
 Ile Thr Thr Asp Gln Asn Asn Asn Asp Glu Glu Glu Tyr Asp Ala Ser
 85 90 95
 Tyr Glu Leu Pro Ile Leu Tyr Val Thr Val Trp Leu Asp Asp Gln Gly
 100 105 110
 Asn Ile Ile Lys Asp Ala Val Glu Asp Ala Lys Thr Pro Ala Ser Glu
 115 120 125
 Arg Gln Pro Val Lys Ile Pro Gly Tyr Gln His Tyr Arg Thr Ser Val
 130 135 140
 Ser Asp Gly Ile Thr Lys Phe Ile Tyr Arg Lys Ile Ser Thr Ala Gln

6136
 362
 PRT
 S.epidermidis
 6136

145 150 155 160
 Ser Pro Ile Val Glu Asn Asn Gln Gln Asp Asn Asn Thr Asn Lys Val
 165 170 175
 Val Glu Thr Thr Asn Gln Asn Lys Asp Glu Val Asn Gly Lys Glu Gln
 180 185 190
 Asn Gln Ala Asn Thr Ser Val Thr Asn Thr Gln Ile Thr Lys Asn Glu
 195 200 205
 Lys Asp Glu Asp Thr Lys Thr Leu Lys Lys Asp Lys Asp Glu Lys Glu
 210 215 220
 Ser Lys Asp Thr Lys Thr Pro Lys Lys Asp Lys Glu Lys Lys Asp Ile
 225 230 235 240
 Lys Thr Pro Lys Lys Asp Arg Glu Glu Lys Lys Pro Val Ile Pro Ser
 245 250 255
 Asn Gly Lys Val Glu Lys Asp Glu Asp Thr Lys Thr Pro Lys Lys Asp
 260 265 270
 Lys Glu Lys Lys Ile Thr Lys Thr Leu Lys Lys Asp Arg Glu Glu Lys
 275 280 285
 Ser Pro Val Ile Pro Lys Ser Gly Lys Asp Glu Lys Asp Thr Lys Ile
 290 295 300
 Thr Lys Lys Asp Lys Glu Asp Glu Ile Thr Thr Thr Ser Lys Lys Asp
 305 310 315 320
 Asn Asn Asn Asp Val Gln Asp Lys Leu Pro Glu Thr Gly Lys Thr Lys
 325 330 335
 Asp Ile Gln Asn Pro Ala Leu Ile Met Leu Leu Thr Gly Leu Gly Leu
 340 345 350
 Leu Gly Leu Phe Arg Asn Lys Ile Arg Glu /
 355 360

<210> 6137

<211> 236

<212> PRT

<213> S.epidermidis

<400> 6137

Ile Lys Glu Phe His Lys Met Tyr Asp Ile Thr Lys Trp Lys His Met
 1 5 10 15
 Phe Lys Leu Asp Pro Ala Lys Ser Ile Ser Asp Glu Asn Leu Glu Ala
 20 25 30
 Leu Cys Met Ser Asn Thr Asp Ala Ile Ile Ile Gly Gly Thr Asp Asp
 35 40 45
 Val Thr Glu Asp Asn Val Ile His Leu Met Ser Arg Val Arg Arg Tyr
 50 55 60
 Pro Leu Pro Leu Val Leu Glu Val Ser Asn Val Glu Ser Val Met Pro
 65 70 75 80
 Gly Phe Asp Phe Tyr Phe Ile Pro Thr Val Met Asn Ser Lys Asp Thr
 85 90 95
 Lys Tyr His Asn Glu Ile Leu Leu Glu Ala Leu Lys Lys Tyr Gly His
 100 105 110
 Val Ile Asn Phe Asp Glu Val Phe Phe Glu Gly Tyr Val Val Leu Asn
 115 120 125
 Ala Asn Ser Lys Val Ala Lys Ile Thr Lys Ala Tyr Thr Gln Leu Gly
 130 135 140
 Ile Glu Asp Val Glu Ala Tyr Ala Gln Met Ala Glu Glu Leu Tyr Arg
 145 150 155 160
 Phe Pro Ile Met Tyr Val Glu Tyr Ser Gly Thr Tyr Gly Asp Val Asp
 165 170 175

Lys Val Lys Ala Ile Ala Asn Met Leu Gln His Thr Gln Leu Phe Tyr
 180 185 190
 Gly Gly Gly Ile Thr Asn Ile Asp Lys Ala Asn Glu Met Ser Asn Ile
 195 200 205
 Ala Asp Thr Ile Val Val Gly Asp Ile Ile Tyr Asn Asp Ile Lys Lys
 210 215 220
 Ala Leu Lys Thr Val Lys Ile Lys Glu Ser Asn Lys
 225 230 235

<210> 6138

<211> 50

<212> PRT

<213> S.epidermidis

<400> 6138

Ile Thr Trp Phe Arg Val Tyr Asp Gln Ile Leu Asn Ala Leu Phe Arg
 1 5 10 15
 Leu Ala Phe Ala Ala Ala Pro His Leu Leu Leu Asn Leu Ala Ser Asp
 20 25 30
 Arg Asn Ser Pro Val His Ser Thr Lys Gly Thr Pro Ser Pro Ile Asn
 35 40 45
 Gly Leu
 50

<210> 6139

<211> 192

<212> PRT

<213> S.epidermidis

<400> 6139

Ser Lys Trp Leu Asn Thr Ile Lys Val Val Trp Ser Met Val Lys Glu
 1 5 10 15
 Ser Ile Pro Lys Glu Gly Glu Asn Ile Lys Ile Gln Ser Tyr Lys His
 20 25 30
 Asp Gly Asn Ile His Arg Val Trp Ser Glu Thr Thr Ile Leu Lys Gly
 35 40 45
 Thr Glu His Val Ile Ile Gly Gly Asn Asp His Thr Leu Val Thr Glu
 50 55 60
 Ser Asp Gly Arg Thr Trp Ile Thr Arg Glu Pro Ala Ile Val Tyr Phe
 65 70 75 80
 His Ser Glu Tyr Trp Phe Asn Val Ile Cys Met Phe Arg Glu Asp Gly
 85 90 95
 Ile Tyr Tyr Tyr Cys Asn Leu Ser Ser Pro Phe Ala Cys Asp Glu Glu
 100 105 110
 Ala Leu Lys Tyr Ile Asp Tyr Asp Leu Asp Ile Lys Val Tyr Pro Asn
 115 120 125
 Gly Lys Tyr His Leu Leu Asp Glu Asp Glu Tyr Glu Gln His Met Asn
 130 135 140
 Gln Met Asn Tyr Pro His Asp Ile Asp Ile Ile Leu Arg Arg Asn Val
 145 150 155 160
 Asp Ile Leu Gln Gln Trp Ile Glu Gln Lys Lys Gly Pro Phe Ala Pro
 165 170 175
 Asp Phe Ile Lys Val Trp Lys Glu Arg Tyr Lys Lys Ile Arg Asp Tyr
 180 185 190

<210> 6140

Asn Asn Lys Thr Asn Gly Ala Lys Ile Lys Gln Ile Glu Ile Arg Lys
 1 5 10 15
 Gln Asn Arg Ile Ser Asn Ala Met Ile Thr Thr Gly Ile Lys Ile Ile
 20 25 30
 Asn Asn Asp Lys Ile Pro Arg Leu Asn Asp Ala Ser Ile Ala Leu Thr
 35 40 45
 Met Phe Ala Lys Val Gly Leu
 50 55

<210> 6144

<211> 402

<212> PRT

<213> S.epidermidis

<400> 6144

Met Lys Arg Thr Ile Phe Leu Leu Met Ser Ile Leu Leu Leu Leu Thr
 1 5 10 15
 Ala Cys Gly Asp Gly His Lys Gln Thr Ser Ser Asp Lys Glu Gln Ser
 20 25 30
 Glu His Lys Asp Asn His Asn Lys Asn Gln Val Lys Gln Ile Ala Thr
 35 40 45
 Asp Lys Lys Val Gln Gly Asp Asn Tyr Arg Thr Ile Leu Pro Phe Lys
 50 55 60
 Glu Ser Gln Ala Arg Gly Leu Leu Gln Asp Asn Met Ala Asn Gly Tyr
 65 70 75 80
 Asn Gly Glu Asp Phe Glu Ser Gly Leu Leu Glu Leu Ser Lys Glu Ile
 85 90 95
 Phe Pro Thr Asn Lys Tyr Leu Tyr Gln Asp Gly Gln Tyr Leu Asp Lys
 100 105 110
 Lys Thr Ile Asn Ala Tyr Leu Asp Pro Lys Tyr Thr Lys Lys Glu Ile
 115 120 125
 Asp Lys Met Ser Glu Lys Glu Lys Lys Ser Lys Asn Ala Asn Glu Asn
 130 135 140
 Leu Gly Leu Asn Pro Ser His Asn Gly Glu Thr Asp Glu Glu Lys Ile
 145 150 155 160
 Ala Glu Asn Ser Pro Ala Tyr Leu Ser Asn Ile Leu Glu Gln Asp Phe
 165 170 175
 Tyr Gly Asn Ser Asp Ser Lys Gly Lys Asn Ile Lys Gly Met Thr Ile
 180 185 190
 Gly Leu Ala Met Asn Ser Val Tyr Tyr Tyr Lys Lys Glu Lys Asp Gly
 195 200 205
 Glu Thr Phe Ser Lys Asp Leu Ser Asp Lys Glu Ile Glu Lys Gln Gly
 210 215 220
 Lys Gln Met Ala Ser Glu Met Leu Ser Arg Leu Arg Glu Asn Ser Asp
 225 230 235 240
 Leu Lys Asp Ile Pro Ile His Phe Ala Ile Tyr Lys Gln Ser Ser Gln
 245 250 255
 Asp Ser Ile Thr Pro Gly Glu Phe Ile Val Gly Thr Thr Val Glu Glu
 260 265 270
 Gly Lys Thr Lys Ile Asn Ser Trp Asp Asn Ile Asn Glu Lys Ala Ala
 275 280 285
 Leu Ile Pro Ser Ser Thr Ala Ala Asp Tyr Asp Glu Thr Leu Asn Asn
 290 295 300
 Asn Phe Lys Gln Phe Asn Asp Asn Leu Gln Ser Tyr Phe Ser Asn Phe
 305 310 315 320
 Thr Gln Ala Val Gly Lys Val Lys Phe Val Asn Lys Lys Ala Lys Gln

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          325          330          335
Leu Thr Val Asp Leu Pro Ile Asp Tyr Tyr Gly Gln Ala Glu Thr Ile
          340          345          350
Gly Ile Thr Gln Tyr Val Thr Glu Gln Ala Glu Lys Tyr Phe Asp Lys
          355          360          365
Leu Asp Glu Tyr Glu Ile Arg Ile Lys Asp Gly Asn Thr Pro Arg Ala
          370          375          380
Leu Ile Ser Lys Thr Lys Asp Asp Lys Glu Pro Gln Val His Ile Tyr
385          390          395          400
His Asn

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<210> 6145
 <211> 48
 <212> PRT
 <213> S.epidermidis

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<400> 6145
Gln Asn Leu Thr Lys Ser Asp Ile Ile Ile Ile Ile Phe Ile Val His
1          5          10          15
Phe Ala His Asn Gln Asn Lys Val Asp Gly Asn Phe Leu Ile Leu Gly
          20          25          30
Val Ile Asn Tyr Asp Asn Ile Lys Gln Ile Pro Tyr Phe Tyr Gln Gln
          35          40          45

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<210> 6146
 <211> 97
 <212> PRT
 <213> S.epidermidis

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<400> 6146
Gly Ser Leu Thr Ala Arg Pro Thr Ser Arg Ala Gly Ser Lys Asp Gly
1          5          10          15
Leu Ser Asp Pro Val Val Pro His Gly Arg Ala Ile Ala Gln Arg Ile
          20          25          30
Lys Ala Thr Pro Gly Ile Thr Gly Leu Ser Pro Pro Arg Val His Ile
          35          40          45
Asp Gly Glu Val Trp His Leu Asp Val Gly Ser Ser His Pro Gly Ala
          50          55          60
Val Val Gly Pro Lys Gly Trp Ala Val Arg Pro Leu Lys Arg Tyr Ala
65          70          75          80
Ser Trp Val Gln Asn Val Val Arg Gln Phe Gly Pro Tyr Pro Ser Trp
          85          90          95
Ala

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<210> 6147
 <211> 691
 <212> PRT
 <213> S.epidermidis

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<400> 6147
Arg Gly Met Thr Met Ser Ile Pro Ile Asn Leu Pro Thr Asn Ser Thr
1          5          10          15
Met Ile Asn Glu Leu Cys Thr Leu Gln Ser Arg Thr Ile Asn Ile Lys
          20          25          30

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Gly	Glu	Val	Leu	Ile	Thr	Glu	Ile	Tyr	Asp	Asp	Tyr	Phe	Phe	Lys	Asn
		35					40					45			
Asp	Glu	Trp	His	Ile	Thr	Ala	Phe	Asn	Lys	Phe	Lys	Gln	Phe	Gln	Asp
	50					55				60					
Ser	Ile	Lys	Asn	Tyr	Arg	Asp	Lys	Arg	Lys	Asn	Val	Phe	Phe	Arg	Ile
65					70					75					80
Lys	Ser	Lys	Asn	Leu	Asn	Leu	Glu	Phe	Lys	Tyr	Leu	Phe	Leu	Lys	Leu
			85						90					95	
Ile	Val	Lys	Glu	Asp	Trp	Ser	Leu	Ser	Asn	Leu	Phe	Asn	Thr	Gly	Ala
		100						105					110		
Val	Lys	Leu	Asn	Lys	Ile	Ala	Lys	Phe	Phe	Asn	Glu	Val	Tyr	Pro	Asn
		115					120					125			
Leu	Asn	Ser	Leu	Leu	Asp	Cys	Asp	Ile	Asn	Thr	Leu	Glu	Lys	His	Trp
	130					135					140				
Phe	Asn	Trp	Leu	Thr	Glu	Asn	Asn	Ile	Pro	Ile	Lys	Arg	Arg	Ser	Ser
145					150					155					160
Thr	Ile	Val	Phe	Gly	Asp	Tyr	Glu	Tyr	Lys	Ser	Gly	Leu	Ala	Ser	Phe
				165					170					175	
Leu	Lys	Asn	Met	Tyr	Ile	Asn	Leu	Ile	Lys	Phe	Ile	Asp	Lys	Arg	Glu
			180					185				190			
Glu	Trp	Glu	Lys	Asp	Lys	Trp	Asp	Ile	Arg	Asn	Leu	Glu	Lys	Tyr	Gly
		195					200					205			
Leu	Ser	Tyr	Asn	Lys	Thr	Leu	Thr	Gly	Asn	Tyr	Leu	Asn	Phe	Glu	Lys
	210					215					220				
Ile	Glu	Ser	Ile	Lys	Met	Arg	Glu	Leu	Ala	Lys	Lys	Tyr	Leu	Lys	Asn
225					230					235					240
Arg	Leu	Ile	Thr	Gly	Asp	Ile	Ala	Phe	Ala	Thr	Ala	Arg	Phe	Tyr	Ile
				245					250					255	
Arg	Val	Leu	Thr	Arg	Phe	Phe	Gln	Asn	Ile	Ser	Lys	Asn	Lys	Glu	Thr
		260						265					270		
Arg	Asn	Ser	Leu	Asn	Glu	Leu	Asp	Arg	Cys	His	Ile	Glu	Ala	Tyr	Ile
		275					280					285			
Glu	Phe	Leu	Phe	Glu	Tyr	Ala	Ala	Asn	Lys	His	Leu	Gln	Ser	Thr	Lys
	290					295					300				
Asn	Phe	Val	Arg	Glu	Glu	Leu	Lys	Thr	Ile	Arg	Arg	Phe	Leu	Asn	Asp
305					310					315					320
Ile	Ile	Thr	Gln	Asn	Tyr	Ala	Ile	Ala	Pro	Tyr	Gln	Asp	Ile	Arg	Phe
				325					330					335	
Leu	Ile	Tyr	Pro	Gln	Asp	Leu	Pro	Lys	His	Glu	Lys	Lys	Asn	Ser	Ser
			340					345					350		
Gln	Ile	Asp	Tyr	Ile	Pro	Asp	Phe	Val	Leu	Glu	Gln	Leu	Phe	Glu	His
		355					360					365			
Ile	Asn	Asp	Leu	His	Lys	Asp	Leu	Ile	Pro	Val	Val	Trp	Ile	Ala	Phe
	370					375					380				
Lys	Thr	Gly	Leu	Arg	Ile	Ser	Asp	Val	Leu	Thr	Leu	Gln	Asn	Asn	Cys
385					390					395					400
Leu	Ala	Lys	Val	Asn	Gly	Lys	Tyr	Ser	Ile	Ile	Thr	Asp	Ile	Ala	Lys
				405					410					415	
Thr	Phe	Val	Lys	Gly	His	Arg	Ile	Pro	Ile	Asp	Asn	Lys	Leu	Ala	Asp
			420					425					430		
Ile	Ile	Ala	Val	Leu	Ile	Ala	Asp	Ser	Lys	Ser	Lys	Ser	Thr	Lys	Asp
		435					440					445			
Asn	Asn	Pro	Asn	Asn	Tyr	Ile	Phe	Ala	Ile	Tyr	Lys	Gly	Lys	Arg	Lys
	450					455					460				
Gly	Met	Pro	Phe	Thr	Gln	His	Met	Val	Arg	Ala	His	Leu	Asn	His	Leu
465					470					475					480

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<210> 6148
<211> 116
<212> PRT
<213> S.epidermidis
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<210> 6149
<211> 41
<212> PRT
<213> S.epidermidis
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<400> 6149

Ser Cys Lys Thr His Thr His Asn Asp Met Cys Gly Cys Val His Lys
 1 5 10 15
 Cys Ser Leu Phe Ser Ser Leu Phe Asn Ile Tyr Tyr Asn Leu Lys Val
 20 25 30
 Glu Ile Thr Lys Leu Thr Tyr Phe Lys
 35 40

<210> 6150

<211> 82

<212> PRT

<213> S.epidermidis

<400> 6150

Ser Pro Lys Thr Tyr Val Lys Thr Thr Ala Asn Asn Ala Pro Ile Thr
 1 5 10 15
 Val Ala Gly Asn Leu Leu Tyr Pro Phe Phe Asn Asp Ala Leu Ala Val
 20 25 30
 Gly Ser Ile Val Thr Ile Ala Val Ser Met Ala Lys Ile Gly Val Arg
 35 40 45
 Phe Asn Asn Ile Gln Asn Lys Asp Val Lys Lys Val Ala Lys Pro Val
 50 55 60
 Leu Ile Val Arg Ala Pro Ile Ile Cys Leu Tyr His Leu Ser Phe Ile
 65 70 75 80
 Ser Tyr

<210> 6151

<211> 491

<212> PRT

<213> S.epidermidis

<400> 6151

Met Gly Arg Thr Leu Lys Met Ser Ile Arg Phe Glu Ser Ile Glu Lys
 1 5 10 15
 Leu Thr Glu Leu Ile Lys Asn Lys Glu Ile Lys Pro Ser Asp Val Val
 20 25 30
 Lys Asp Ile Tyr Ala Ala Ile Glu Glu Thr Asp Pro Thr Ile Lys Ser
 35 40 45
 Phe Leu Ala Leu Asp Lys Glu Asn Ala Ile Lys Lys Ala Glu Glu Leu
 50 55 60
 Asp Glu Leu Gln Ala Lys Asp Gln Met Asp Gly Lys Leu Phe Gly Ile
 65 70 75 80
 Pro Met Gly Ile Lys Asp Asn Ile Ile Thr Lys Asp Val Glu Thr Thr
 85 90 95
 Cys Ala Ser Lys Met Leu Glu Gly Phe Val Pro Ile Tyr Glu Ser Thr
 100 105 110
 Val Met Asn Lys Leu His Asp Glu Asn Ala Val Leu Ile Gly Lys Leu
 115 120 125
 Asn Met Asp Glu Phe Ala Met Gly Gly Ser Thr Glu Thr Ser Tyr Phe
 130 135 140
 Lys Lys Thr Leu Asn Pro Phe Asp His Thr Ala Val Pro Gly Gly Ser
 145 150 155 160
 Ser Gly Gly Ser Ala Ala Ala Val Ala Ala Gly Leu Val Pro Phe Ser
 165 170 175

6149-6151: S.epidermidis

Leu Gly Ser Asp Thr Gly Gly Ser Ile Arg Gln Pro Ala Ser Tyr Cys
 180 185 190
 Gly Val Val Gly Met Lys Pro Thr Tyr Gly Arg Val Ser Arg Phe Gly
 195 200 205
 Leu Val Ala Phe Ala Ser Ser Leu Asp Gln Ile Gly Pro Ile Thr Arg
 210 215 220
 Asn Val Lys Asp Asn Ala Leu Val Leu Glu Ala Ile Ser Gly Val Asp
 225 230 235 240
 Ala Asn Asp Ser Thr Ser Ala Pro Val Asp Asp Val Asp Phe Thr Ser
 245 250 255
 Asp Ile Gly Lys Asp Ile Lys Gly Leu Lys Ile Ala Leu Pro Lys Glu
 260 265 270
 Tyr Leu Gly Glu Gly Val Ser Glu Glu Val Lys Thr Ser Val Lys Glu
 275 280 285
 Ala Val Glu Thr Leu Lys Ser Leu Gly Ala Glu Val Asp Glu Val Ser
 290 295 300
 Leu Pro Asn Thr Lys Tyr Gly Ile Pro Ser Tyr Tyr Val Ile Ala Ser
 305 310 315 320
 Ser Glu Ala Ser Ala Asn Leu Ala Arg Phe Asp Gly Ile Arg Tyr Gly
 325 330 335
 Tyr His Ser Lys Glu Ala Gln Ser Leu Glu Glu Leu Tyr Lys Met Ser
 340 345 350
 Arg Ser Glu Gly Phe Gly Glu Glu Val Lys Arg Arg Ile Phe Leu Gly
 355 360 365
 Thr Phe Ala Leu Ser Ser Gly Tyr Tyr Asp Ala Tyr Tyr Lys Lys Ser
 370 375 380
 Gln Lys Val Arg Thr Leu Ile Lys Asn Asp Phe Asp Lys Val Phe Glu
 385 390 395 400
 Ser Tyr Asp Val Val Gly Pro Thr Ala Pro Thr Thr Ala Phe Asn
 405 410 415
 Ile Gly Glu Glu Ile Asp Asp Pro Leu Thr Met Tyr Ala Asn Asp Leu
 420 425 430
 Leu Thr Thr Pro Val Asn Leu Ala Gly Leu Pro Gly Ile Ser Val Pro
 435 440 445
 Cys Gly Gln Ser Asn Gly Arg Pro Ile Gly Leu Gln Leu Ile Gly Lys
 450 455 460
 Pro Phe Asp Glu Lys Thr Leu Tyr Arg Val Ala Tyr Gln Phe Glu Thr
 465 470 475 480
 Gln Tyr Asn Leu His Asp Ala Tyr Glu Asn Leu
 485 490

<210> 6152

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6152

Thr Thr Pro Ala Tyr Leu Lys Leu Glu Arg Lys Ile Gly Phe Ala Pro
 1 5 10 15
 Ile Ser His Ser Gly Lys Glu Cys Val Leu Arg Val Glu Leu Leu Pro
 20 25 30
 His Asn Ile Lys Ile Trp Ser Gly Arg
 35 40

<210> 6153

<211> 52

290 295 300
 Lys Phe
 305

<210> 6155
 <211> 148
 <212> PRT
 <213> S.epidermidis

<400> 6155
 Gly Gly Arg Ala Leu Ala Ser Ile Arg Glu Asp Val Gln Phe Ser Asn
 1 5 10 15
 Pro Thr Ile Ser Glu Ser Ser Phe Lys Ile Asn Glu Asn Phe Asp Ser
 20 25 30
 Glu Asn Phe Glu Gly Phe Gly Asp Ile Lys Leu Asn Leu Lys Lys Tyr
 35 40 45
 Tyr Tyr Glu Glu Asn Asn Glu Ile Asp Asn Asn Asn Asn Asn Asn Gly
 50 55 60
 Ser Ala Leu Leu Ser Leu Glu Ile Ile Ile Gly Asp Ile Asp Trp Lys
 65 70 75 80
 Tyr Pro Phe Met Phe Lys Val Glu Ile Glu Ser Phe Phe Glu Trp Glu
 85 90 95
 Asn Phe Lys Gly Thr Asp Ile Asp Lys Phe Leu Glu Ile Asn Gly Ala
 100 105 110
 Ala Ile Leu Tyr Ser Tyr Ser Arg Ala His Ile Ser His Ile Thr Asn
 115 120 125
 Thr Ser Lys Tyr Pro Ser Phe Asp Leu Pro Phe Tyr Asn Phe Thr Asp
 130 135 140
 Asn Asp Tyr Gln
 145

<210> 6156
 <211> 370
 <212> PRT
 <213> S.epidermidis

<400> 6156
 Leu Lys Gly Ala Phe Asn Leu Arg Leu Gly Ala Arg Ile Phe Lys Thr
 1 5 10 15
 Gly Ile Ala Ile Ile Leu Ala Met Ser Ile Ala Ser Leu Leu Pro Asp
 20 25 30
 Asn Ile Gly Leu Lys Thr Leu Ala Gly Val Ser Ala Val Val Ala Met
 35 40 45
 Gln Pro Ser Val Tyr Arg Ser Ile Lys Thr Val Ser Glu Gln Ala Ile
 50 55 60
 Gly Asn Val Ile Gly Ala Leu Leu Ala Val Thr Met Val Thr Ile Phe
 65 70 75 80
 Ser Asn Asn Phe Ile Ile Met Gly Val Thr Val Ile Leu Leu Ile Ala
 85 90 95
 Ile Leu Phe Gln Phe Asn Leu Ala His Val Ala Thr Leu Ala Ser Val
 100 105 110
 Thr Ala Leu Ile Ile Met Gly Gln His Thr Gly Ser Phe Tyr Val Ala
 115 120 125
 Ala Phe Phe Arg Phe Val Leu Val Met Ile Gly Val Leu Ser Ser Ser
 130 135 140
 Val Val Asn Leu Ile Phe Leu Pro Pro Lys Phe Glu Thr Lys Ile Tyr

145 150 155 160
 Tyr Asn Ser Met Asn Ile Ser Ser Asp Ile Phe Val Trp Phe Lys Leu
 165 170 175
 Val Leu Asn Asp Thr Ser Glu Phe His Asn Ile Lys Gln Asp Gly Asp
 180 185 190
 Gln Leu Asn Ser Arg Ile Asn Lys Leu Glu Lys Ile Phe Asp Tyr Tyr
 195 200 205
 Asn Glu Glu Arg Pro Leu Thr Lys Lys His Ile Tyr Gln Gln Asn Arg
 210 215 220
 Lys Lys Ile Leu Phe Arg Glu Val Val Arg Thr Thr Arg Gln Ala Tyr
 225 230 235 240
 Glu Val Leu Lys Arg Met Ser Arg Tyr Gln Asn Asp Leu Tyr Gln Leu
 245 250 255
 Asn Asn Gln Leu Leu Leu Gln Ile Lys Leu Glu Leu Asp Ser Leu Val
 260 265 270
 Thr Leu His Glu Gln Ile Phe Lys Ser Leu Ser Lys Lys Ala Arg Tyr
 275 280 285
 Asp Val Thr Gln Leu Asp Tyr Glu Val Asp Asn Pro Gln Lys Lys Asn
 290 295 300
 Leu Met Asp Ala Phe Gln Gln Glu Leu Ile Lys Asn Pro His Gln Thr
 305 310 315 320
 Gln Tyr Ser Tyr Ser Asn Met Met Gln Ile Ile Ala Glu Ile Glu Glu
 325 330 335
 Tyr Arg Tyr Gln Leu Glu His Leu Asp Arg Ile Arg Leu Ser Phe Phe
 340 345 350
 Thr Tyr His Arg Ser Asp Thr Asp Ile Asp Ile Ser Asp Glu Asp Phe
 355 360 365
 Asp Leu
 370

<210> 6157
 <211> 105
 <212> PRT
 <213> S.epidermidis

<400> 6157
 Gly Gly Phe Tyr Leu Met Thr Lys Val Thr Arg Glu Glu Val Glu His
 1 5 10 15
 Ile Ala Asn Leu Ala Arg Leu Gln Ile Ser Pro Glu Glu Thr Glu Glu
 20 25 30
 Met Ala Asn Thr Leu Glu Ser Ile Leu Asp Phe Ala Lys Gln Asn Asp
 35 40 45
 Ser Ala Asp Thr Glu Gly Ile Glu Pro Thr Tyr His Val Leu Asp Leu
 50 55 60
 Gln Asn Val Leu Arg Asp Asp Lys Ala Ile Glu Gly Ile Pro Gln Glu
 65 70 75 80
 Leu Ala Leu Lys Asn Ala Lys Glu Thr Glu Asp Gly Gln Phe Lys Val
 85 90 95
 Pro Ser Ile Met Asn Gly Glu Asp Ala
 100 105

<210> 6158
 <211> 70
 <212> PRT
 <213> S.epidermidis

<400> 6158

Val	Lys	Ile	Tyr	Leu	Met	Ser	Glu	Tyr	Ile	Ser	Thr	Tyr	Ser	Thr	Leu
1				5					10					15	
Tyr	Leu	Tyr	Ser	Val	Asn	Thr	Phe	Val	Leu	Tyr	Ile	Cys	Lys	Thr	Lys
			20					25					30		
Ser	Tyr	Val	Lys	Arg	Lys	Arg	Leu	Tyr	Lys	Leu	Leu	Gln	Pro	Leu	Leu
		35					40					45			
Leu	Ile	Tyr	Asp	Tyr	Leu	Tyr	Glu	Ile	Ala	Lys	Gln	Ser	Tyr	Tyr	Phe
	50					55					60				
Ile	Ile	Thr	Leu	Ser	Gln										
65					70										

<210> 6159

<211> 215

<212> PRT

<213> S.epidermidis

<400> 6159

Ala	Cys	Phe	Leu	Lys	Asn	Val	Ala	Gln	Asn	Cys	Ile	Met	Thr	Pro	Glu
1				5					10					15	
Glu	Ser	Ser	Lys	Gln	Val	Lys	Ile	Ile	Asp	Lys	Lys	Ile	Glu	Gln	Phe
			20					25					30		
Ala	Gln	Tyr	Leu	Gln	Arg	Lys	Asn	Asn	Leu	Asp	His	Ile	Gln	Phe	Leu
		35					40					45			
Lys	Ile	Arg	Leu	Gly	Met	Gln	Val	Leu	Ala	Ile	Asn	Ile	Glu	Lys	Ser
	50					55					60				
Ile	Val	Val	Tyr	Gly	Leu	Ala	Ile	Ile	Phe	His	Thr	Phe	Phe	Tyr	Thr
65					70					75					80
Leu	Leu	Thr	His	Leu	Ser	Tyr	Phe	Leu	Ile	Arg	Arg	His	Ala	His	Gly
			85						90					95	
Thr	His	Ala	Asn	Ser	Ser	Leu	Leu	Cys	His	Ile	Gln	Asn	Ile	Ile	Phe
			100						105					110	
Phe	Ile	Ile	Phe	Pro	Tyr	Leu	Ile	Ile	Lys	Leu	Asp	Ile	Asn	Tyr	Phe
		115					120					125			
Val	Leu	Leu	Ser	Met	Ala	Leu	Val	Gly	Leu	Ile	Ile	Thr	Ile	Leu	Tyr
	130					135					140				
Ala	Pro	Ala	Ala	Thr	Lys	Lys	Gln	Pro	Ile	Pro	Arg	Arg	Leu	Val	Lys
					150					155					160
Arg	Lys	Lys	Ile	Leu	Ser	Ile	Phe	Leu	Tyr	Cys	Thr	Ile	Val	Val	Ile
			165						170					175	
Ser	Leu	Val	Thr	Lys	Glu	Pro	Val	Asn	Lys	Leu	Ile	Leu	Phe	Gly	Val
		180						185					190		
Ile	Leu	Glu	Ser	Leu	Thr	Leu	Leu	Pro	Ile	Phe	Phe	Pro	Lys	Glu	Asp
	195						200					205			
Ile	Asn	His	Gly	Lys	His	Phe									
	210					215									

<210> 6160

<211> 99

<212> PRT

<213> S.epidermidis

<400> 6160

Val	Val	Leu	Leu	Glu	Glu	Gly	Leu	Gln	Lys	Leu	Ile	Asp	Arg	His	His
1				5					10					15	
Ile	Thr	Ala	Thr	Ile	Asn	Arg	Ile	Tyr	Gly	Ser	Leu	Thr	Leu	Tyr	Phe

2700

His Gln Phe Thr His Leu Thr Trp Glu Ile Lys Val Tyr Asn Val Thr
 305 310 315 320
 Ala Pro Leu Asn Ile Lys Glu Asn Asp Leu Pro Lys Gln Met Thr Trp
 325 330 335
 Phe Asn Leu Asp Asp Arg Glu Gln Tyr Thr Phe Pro Val Pro Met Asp
 340 345 350
 Lys Ile Tyr Lys Phe Ile Glu Gly
 355 360

<210> 6162
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 6162
 Pro Leu His Tyr Gly Thr Ile Lys Thr Glu Glu Glu Gly Phe Glu Pro
 1 5 10 15
 Pro Arg Ala Val Lys Leu Leu Ser Val Phe Lys Thr Asp Pro Phe Ser
 20 25 30
 Arg Thr Trp Val Phe Leu Gln Asn Tyr Met Asp Leu Ala Gly Leu Glu
 35 40 45
 Pro Ala Thr Glu Arg Leu
 50

<210> 6163
 <211> 111
 <212> PRT
 <213> S.epidermidis

<400> 6163
 His Ser Ile Tyr Gln Ser Ala Lys Ser His Val Asn Glu Gly Gly Thr
 1 5 10 15
 Ile Met Leu Lys Pro Leu Gly Asn Arg Val Ile Ile Glu Lys Lys Glu
 20 25 30
 Gln Glu Gln Thr Thr Lys Ser Gly Ile Val Leu Thr Asp Ser Ala Lys
 35 40 45
 Glu Lys Ser Asn Glu Gly Val Ile Ile Ala Val Gly Gln Gly Arg Leu
 50 55 60
 Leu Asp Asn Gly Thr Gln Val Ala Pro Gln Val Ser Glu Gly Asp Thr
 65 70 75 80
 Ile Val Phe Gln Gln Tyr Ala Gly Thr Glu Val Lys Arg Gly Asp Lys
 85 90 95
 Thr Tyr Leu Ile Leu Asn Glu Glu Asp Ile Leu Ala Ile Ile Glu
 100 105 110

<210> 6164
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6164
 Ile Asn Ile Tyr Lys Val Met Tyr Tyr Arg Val Met Leu Lys Leu Asn
 1 5 10 15
 Leu Arg Met Leu Leu Thr Ile His Ser Tyr Glu Ala Asn Arg Glu Glu
 20 25 30
 Arg Phe Tyr Val Ser Arg Lys Phe Phe

61626364

35

40

<210> 6165
 <211> 82
 <212> PRT
 <213> S.epidermidis

<400> 6165
 Glu Ile Ser Leu Ser Cys His Lys Gly Ile Phe Ser Tyr Ala Val Val
 1 5 10 15
 Ile Tyr Pro Arg Ile Thr Arg Asp Ile Pro Val Ile Phe Ser Glu Pro
 20 25 30
 Ile Gly Phe Leu Leu Cys Gly Ile Ala Asp Asp Pro Phe Cys Pro Phe
 35 40 45
 Ala Asn Ala Ser Ser Thr Ser Leu Val Ser Val Phe Cys Lys Leu Arg
 50 55 60
 Ile Ser Thr Ala Asn Phe Ser Ile Asp Val Ala Ile Ser Ala Asn Val
 65 70 75 80
 Ala Met

<210> 6166
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6166
 Ile Lys Pro Tyr Leu Phe Tyr Tyr Thr Ala Asn Thr Gly Ile Ser Ile
 1 5 10 15
 Leu Lys Val Lys His Lys Lys Gln Arg Arg Leu Leu Cys Gln Lys Lys
 20 25 30
 Arg Lys Gln Leu Leu Asn Ile Leu Ile Gln
 35 40

<210> 6167
 <211> 318
 <212> PRT
 <213> S.epidermidis

<400> 6167
 Gln Tyr Met Tyr Lys Glu Ile Leu Lys Met Thr Lys Thr Phe Ile Phe
 1 5 10 15
 Gly His Lys Asn Pro Asp Thr Asp Ala Ile Ser Ser Ala Leu Ile Met
 20 25 30
 Ala Asp Phe Glu Gln Gln Thr Gly Asn Thr Glu Ala Lys Ala Tyr Arg
 35 40 45
 Leu Gly Glu Ile Ser Ala Glu Thr Gln Phe Ala Leu Asp Tyr Phe Asn
 50 55 60
 Val Glu Ala Pro Glu Leu Asn Glu Asp Leu Lys Gly Gln Asp Val
 65 70 75 80
 Ile Leu Val Asp His Asn Glu Phe Gln Gln Ser Ala Asp Thr Ile Ser
 85 90 95
 Asn Ala Thr Ile Lys His Val Ile Asp His His Arg Ile Ser Asn Phe
 100 105 110
 Glu Thr Ala Gly Pro Leu Tyr Tyr Arg Ala Glu Pro Val Gly Cys Ser
 115 120 125

<212> PRT
 <213> S.epidermidis

<400> 6169
 Asn Ser His Leu Asp Tyr Leu Cys Arg Phe Ala Val Arg Ala Pro Val
 1 5 10 15
 Ile Tyr Leu Glu Ala Phe Leu Gly Ser Val Lys Ser Thr Thr Arg Gly
 20 25 30
 Asn Asn Phe Leu Ser Pro Ser Gln Leu Ser Leu Met Ser Ala Gly Phe
 35 40 45
 Ala

<210> 6170
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 6170
 His Pro Phe His Cys Ile Glu Lys Asn Arg Ile Glu Phe Glu Leu Ser
 1 5 10 15
 Leu Met Val Asn Pro Leu Pro Lys Glu Tyr Ile Cys Asn Leu Met Leu
 20 25 30
 Leu Met Ile Leu Thr His Phe Ser Ser Arg Gln
 35 40

<210> 6171
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6171
 Asn Ser Ile His Ser Val Leu Leu Gly Lys Ile Leu Leu Thr Tyr Pro
 1 5 10 15
 Val Phe Asn Val Gln Asn Ile Met Val Glu Thr Ser Gly Ile Glu Pro
 20 25 30
 Leu Thr Ser Cys Val Gln Ser Arg Arg Ser Pro Ser
 35 40

<210> 6172
 <211> 63
 <212> PRT
 <213> S.epidermidis

<400> 6172
 Val Val Ala Gln Met Ser Lys Lys Phe Arg Val Glu Asp Lys Glu Thr
 1 5 10 15
 Ile Ala Asp Cys Leu Asp Arg Met Lys Lys Glu Gly Phe Met Pro Ile
 20 25 30
 Arg Arg Ile Glu Lys Pro Val Tyr Lys Glu Asn Lys Asp Gly Ser Ile
 35 40 45
 Glu Ile Leu Lys Gln Asp Ile Ile Phe Val Gly Ala Leu Ile Gln
 50 55 60

<210> 6173
 <211> 378

<212> PRT

<213> S.epidermidis

<400> 6173

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Ala His Asn His Tyr Leu Lys Tyr Met Arg Ser Tyr Asn Met Phe Ile
1      5      10
Asn Ala Lys Asp Phe Gly Leu Lys Gly Lys Ser Lys Tyr Lys Asp Thr
20      25      30
Arg Ala Ile Gln Lys Ala Leu Asn Tyr Ala Lys Lys Gly Arg His Thr
35      40      45
Val Tyr Ile Pro Lys Gly Thr Tyr Tyr Ile Arg Lys Ala Leu Val Ile
50      55      60
Tyr Asp Ser Thr Thr Leu Leu Glu Glu Gly Ala Thr Leu Leu Arg
65      70      75      80
Lys Gly Lys Asp Ala Leu Leu Lys Asn Gly Arg Arg Leu Lys Leu Tyr
85      90      95
His Gly Tyr Asn Gly Asn Ser His Ile Tyr Ile Lys Gly Gly Thr Phe
100      105      110
Asp Met Asn Gly Gly Glu Tyr Pro Tyr Asn Asn Thr Ala Met Cys Met
115      120      125
Gly His Ala Glu Asp Ile Gln Ile Leu Gly Val Thr Phe Lys Asn Ile
130      135      140
Val Gly Gly His Ala Leu Asp Ala Cys Gly Ile Asn Gly Leu His Ile
145      150      155      160
Ser Glu Cys Glu Phe Lys Gly Phe Leu Asp Ile Asp Gly Asp Arg Ser
165      170      175
Phe Ser Glu Ala Val Gln Leu Asp Ile Gln Val Pro Gly Ala Phe Pro
180      185      190
Lys Phe Gly Thr Thr Asp Gly Thr Ile Thr Lys Asn Val Val Ile Glu
195      200      205
Lys Cys Tyr Phe Gly Cys Ser Asp His Pro Lys Met Lys Ala Trp Asn
210      215      220
Arg Ala Ile Gly Ser His Ala Ser Arg Tyr Asn Cys Tyr Tyr Glu Asn
225      230      235      240
Ile His Ile Asn Gln Asn Ile Phe Asp Asn Leu Asn Glu Tyr Ala Leu
245      250      255
Thr Pro Leu Lys Ser Lys Asp Thr Phe Ile Thr Lys Asn Lys Phe Ile
260      265      270
Asn Cys Asn Gly Gly Ile Arg Phe Leu Gly Val Lys Asp Gly Lys Asn
275      280      285
Ala Ala Asp Pro Ile Thr Gly Gln Val Met Glu Thr Gln Ala Gly Glu
290      295      300
Asn Phe Asn Val Ile Gly Asn Thr Phe Ile Gly Lys Met Lys Arg Asp
305      310      315      320
Ala Ile His Ile Arg Ser Tyr His His Val Gln His Gln Asn Val Phe
325      330      335
Ile Ala Ala Asn Gln Phe Glu Asp Ala Ser Gln Ser Ile His Leu Glu
340      345      350
Asn Ile Asn Gly Leu Thr Leu Asn Gln Glu Gln Thr Lys Ile Lys Ile
355      360      365
Lys Ser Ile Asp Val Lys Asn Ile Ser Asn
370      375

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<210> 6174

<211> 181

<212> PRT

<213> S.epidermidis

<400> 6174

Met Lys Leu His Cys Ala Tyr Ala Ile Leu Ile Arg Thr Arg Val Lys
 1 5 10 15
 Val Val Thr Gln Val Arg Ile Gln Ser Arg Trp Leu Ile Phe Ala Ile
 20 25 30
 Phe Leu Thr Gly Ala Ile Ser Leu Leu Ile Gly Leu Thr Tyr Tyr Lys
 35 40 45
 Ser Ile Lys Ser Val Asp Leu Ser Gly Tyr Ser Val Asn Gln Ile Ser
 50 55 60
 Leu Asn His Gly Phe Asn Gln Lys Gly Phe Val Val Asn Lys Lys Ile
 65 70 75 80
 Lys Leu Asp Arg Tyr Thr Phe Tyr Asn Asp Lys Asn His Lys Asp Phe
 85 90 95
 Thr Val Lys Val Lys Asn Lys Thr His Lys Val Lys Gly Met Val Leu
 100 105 110
 Val Lys Asp Asp Lys Val Glu Thr Asn Phe Gly Ile Lys Met Gly Asp
 115 120 125
 Pro Ile Asp Lys Val Ile Asn Lys Leu Gly Glu Asn Tyr Lys Ile Asn
 130 135 140
 Lys Val Gly Lys Asn Tyr His Ser Met Thr Tyr Val Asp Arg Phe Asn
 145 150 155 160
 Lys Leu Lys Leu Asn Ile Leu Tyr Lys Asp Asn Ile Val Lys Arg Ile
 165 170 175
 Glu Phe Phe Ser Lys
 180

<210> 6175

<211> 47

<212> PRT

<213> S.epidermidis

<400> 6175

Val Thr Met His Val Leu Thr Val Pro Asn Gln Lys Ala Thr Ala Asn
 1 5 10 15
 Tyr Val Pro Ala Ala Ala Val Ile Arg Arg Trp Gln Ala Leu Ser Gly
 20 25 30
 Ile Ile Gly Arg Lys Ala Arg Val Gly Gly Phe Leu Ser Leu Met
 35 40 45

<210> 6176

<211> 228

<212> PRT

<213> S.epidermidis

<400> 6176

Gln Thr Phe Lys Leu Thr Ile Ile Phe Trp Gln Gly Val Ser Ser Asn
 1 5 10 15
 Met Lys Ala Thr Arg Val Phe Asn Val Val Val Phe Leu Gln Phe Ser
 20 25 30
 Thr Tyr Leu Leu Phe Gly Met Asn Ile Gln Leu Leu Phe Asp Lys Lys
 35 40 45
 Glu Ser Asp Tyr Leu Phe Phe Ile Ile Pro Leu Phe Phe Thr Tyr Ile
 50 55 60
 Phe Asp Asn Ser Tyr Thr Val Leu Ile Asp Phe Cys Lys Pro Thr Glu

65 70 75 80
 Lys Leu Lys Lys Val Glu Ser Asn Asn Ile Arg Phe Ile Asn Ile Ile
 85 90 95
 Met Leu Leu Ala Ile Ile Ile Tyr Ala Tyr Ile Tyr Lys Asn Lys Lys
 100 105 110
 Ile Arg Trp Phe Lys Asp Leu Val Asp Ser Ala Asn Glu Asn Trp Cys
 115 120 125
 Leu Ser Ile Ile Leu Ile Ile Ile Met Ser Leu Leu Ile Ser Tyr Ile
 130 135 140
 Trp Ser Lys Tyr Phe Ile Lys Ser Asp Tyr Ile Glu Lys Leu Lys Glu
 145 150 155 160
 Glu Asp Phe Asp Ile Leu Gly Ile Glu Asn Val Ile Asn Trp Leu Thr
 165 170 175
 Lys Ser Asn Ile Lys Ser Lys Asp Ile Ser Glu Gly Thr Asn Val Glu
 180 185 190
 Ile Glu Lys Ile Glu Leu Leu Leu Lys Asp Glu Lys Asn Ile Asp Asp
 195 200 205
 Phe Ser Tyr Gly Glu Val Lys Ser Ile Leu Ala Tyr Val Lys Tyr Val
 210 215 220
 Arg Glu Ser Lys
 225

<210> 6177

<211> 434

<212> PRT

<213> S.epidermidis

<400> 6177

Lys Glu Val Lys Thr Met Met Asn Pro Leu Ala Gln Lys Leu Asn Asp
 1 5 10 15
 Glu Ile Lys Gln Ser Ser Pro Glu Val Leu Asp Met Met Ser Gln Leu
 20 25 30
 Gly Lys Asp Met Phe Tyr Pro Lys Gly Ile Leu Ser Gln Ser Ala Glu
 35 40 45
 Ala Lys Arg Thr Thr Tyr Asn Ala Thr Ile Gly Met Ala Thr Lys Lys
 50 55 60
 Glu Gly Lys Met Tyr Ala Asn Ser Leu Asn Gln Met Phe Asn Asp Leu
 65 70 75 80
 Thr Pro Asp Glu Ile Phe Pro Tyr Ala Pro Pro Gln Gly Val Glu Glu
 85 90 95
 Leu Arg Asp Leu Trp Gln Lys Lys Met Leu Lys Glu Asn Pro Asp Leu
 100 105 110
 Lys Ser Lys Ser Ile Ser Arg Pro Ile Val Thr Asn Ala Leu Thr His
 115 120 125
 Gly Leu Ser Leu Val Ala Asp Leu Phe Val Asp Thr Asp Asp Thr Val
 130 135 140
 Leu Leu Pro Thr His Asn Trp Gly Asn Tyr Lys Leu Val Phe Ser Thr
 145 150 155 160
 Arg His Gly Ala His Ile Asp Thr Tyr Ser Ile Phe Asp Asn Ser Gly
 165 170 175
 His Phe Thr Thr Ser Glu Leu Val Lys Thr Leu Lys Glu Tyr Lys Lys
 180 185 190
 Asp Lys Val Ile Ile Ile Leu Asn Tyr Pro Asn Asn Pro Thr Gly Tyr
 195 200 205
 Thr Pro Asn Lys Glu Glu Val Asn Thr Ile Val Asn Ala Ile Glu Glu
 210 215 220

Leu Ala Asn Lys Gly Thr Lys Val Val Thr Val Val Asp Asp Ala Tyr
 225 230 235 240
 Tyr Gly Leu Phe Tyr Glu Glu Val Tyr Gln Gln Ser Ile Phe Thr Ala
 245 250 255
 Leu Thr Gln Val Lys Ser Ser Asn Leu Leu Pro Val Arg Leu Asp Gly
 260 265 270
 Ala Thr Lys Glu Phe Phe Ser Trp Gly Phe Arg Val Gly Phe Met Thr
 275 280 285
 Phe Gly Ile Asp His Glu Thr Leu Lys Asn Ala Leu Glu Ala Lys Val
 290 295 300
 Lys Gly Leu Ile Arg Ser Asn Ile Ser Ser Ser Pro Leu Pro Ser Gln
 305 310 315 320
 Ser Ala Ile Lys His Val Leu Lys His His Glu Gln Phe Asp Lys Glu
 325 330 335
 Ile Asp Gln Asn Ile Asn Ile Leu Lys Glu Arg Tyr Glu Val Thr Lys
 340 345 350
 Gln Val Val Tyr Asp Asn Lys Tyr Ala Lys Tyr Trp Gln Ala Tyr Asp
 355 360 365
 Phe Asn Ser Gly Tyr Phe Met Ser Leu Lys Leu Asn Gln Val Asp Pro
 370 375 380
 Glu Glu Leu Arg Glu His Leu Ile Asn Asn Tyr Ser Ile Gly Ile Ile
 385 390 395 400
 Ala Leu Asn Ser Thr Asp Ile Arg Ile Ala Phe Ser Cys Val Glu Lys
 405 410 415
 Glu Asp Ile Pro Tyr Val Phe Glu Ser Ile Ala Asn Ala Ile Asp Asp
 420 425 430
 Ile Lys

<210> 6178

<211> 177

<212> PRT

<213> S.epidermidis

<400> 6178

Phe Met Ala Asn Thr Asn Arg Lys Ser Lys Lys Met Ser Asp Ala Lys
 1 5 10 15
 Cys Ile Lys Thr Arg Gln Val Tyr Pro Gln Asp Thr Asn His His His
 20 25 30
 Thr Met Phe Gly Gly Thr Leu Met Ala Asn Ile Asp Glu Ile Ala Ala
 35 40 45
 Ile Thr Ala Met Lys His Ala Gly Asn Pro Val Val Thr Ala Ser Thr
 50 55 60
 Asp Ser Val Asp Phe Leu Arg Pro Ile Thr Thr Gly Asp Ile Leu Ser
 65 70 75 80
 Tyr Glu Ala Met Val Ser Tyr Ala Gly Thr Ser Ser Met Glu Ile Cys
 85 90 95
 Val Gln Ile Val Ile Asp Asp Val Tyr Lys Asn Glu Arg His Leu Ala
 100 105 110
 Ala Leu Ser Phe Leu Thr Phe Val Ala Leu Asp Ser Asp Gly Lys Pro
 115 120 125
 Thr Ser Val Pro Asp Val Glu Pro Glu Thr Ser Val Glu Lys Trp Phe
 130 135 140
 His Glu Thr Ala Pro Gln Arg Val Ala Arg Arg Lys Glu Arg Arg Lys
 145 150 155 160
 Glu Ser Ile Asp Thr Ile Glu Tyr Leu Ser Arg Val Arg His Ile Glu

Lys 165 170 175
 <210> 6179
 <211> 208
 <212> PRT
 <213> S.epidermidis
 <400> 6179
 His Asp Tyr Lys Lys Met Lys Thr Ser Tyr Arg Asn Gln Leu Glu Lys
 1 5 10 15
 Asn Tyr Asp Ser Arg Ile Thr Gly Lys Arg Leu Asn Glu Glu Thr Leu
 20 25 30
 Leu Phe Leu Gly Thr Gly Ala Ile Ala Gln Arg Ala Ala Tyr Leu Ala
 35 40 45
 Lys Ala Phe Gly Met Lys Val Ile Gly Val Ser Lys Ser Gly Lys Asn
 50 55 60
 Val Glu His Phe Asp Glu Val Tyr Thr Ile Glu Glu Leu Asp Asp Val
 65 70 75 80
 Ile Glu Lys Ala Asn Ile Ile Val Asn Ala Leu Pro Glu Thr Glu Glu
 85 90 95
 Thr Ile Tyr Leu Leu Lys Arg Lys Asp Phe Ile Gln Met Asp Asn Asn
 100 105 110
 Ala Leu Phe Ile Asn Val Gly Arg Gly Thr Ile Val Asp Glu Glu Val
 115 120 125
 Leu Ile Asn Val Leu Lys Asp Arg Leu Ile Arg His Ala Tyr Leu Asp
 130 135 140
 Val Phe Glu Lys Glu Pro Leu Ser Lys Asp Asn Pro Leu Tyr Asp Leu
 145 150 155 160
 Asp Asn Val Thr Ile Thr Ala His Ile Thr Gly Asn Asp Ser Asn Asn
 165 170 175
 Asn Arg Glu Ala Thr Asp Ile Phe Lys Lys Asn Leu Glu His Phe Leu
 180 185 190
 Asn Asn Tyr Asp Val Ile Glu Asn Lys Val Asp Leu Asp Tyr Gly Tyr
 195 200 205

<210> 6180
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 6180
 Leu Leu Tyr Asn Ile Thr Ala Asn Tyr Ser Tyr Asn Asn Thr Val Leu
 1 5 10 15
 Asp His Ser Pro Leu Gln His Arg Ala Phe Leu Ser Ile Lys Lys Thr
 20 25 30
 Pro His Leu Ser Asp Val Ile Asn
 35 40

<210> 6181
 <211> 126
 <212> PRT
 <213> S.epidermidis

<400> 6181

Met Ala Asn Lys Gln Val Glu Ile Ser Met Ala Glu Trp Asp Val Met
 1 5 10 15
 Asn Ile Ile Trp Asn Lys Lys Ser Val Ser Ala Asn Glu Ile Val Val
 20 25 30
 Glu Ile Gln Lys Asn Lys Glu Val Ser Asp Lys Thr Ile Arg Thr Leu
 35 40 45
 Ile Thr Arg Leu Tyr Lys Lys Glu Ile Ile Lys Arg Tyr Lys Tyr Asn
 50 55 60
 Asn Ile Tyr Phe Tyr Ser Ile Ile Lys Glu Asp Asp Ile Lys Met
 65 70 75 80
 Lys Thr Ala Lys Thr Phe Leu Asn Lys Leu Tyr Gly Gly Asp Met Lys
 85 90 95
 Ser Leu Val Leu Asn Phe Ala Lys Asn Glu Glu Leu Asn Asn Lys Glu
 100 105 110
 Ile Glu Glu Leu Arg Asp Ile Leu Asn Asp Ile Ser Lys Lys
 115 120 125

<210> 6182
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 6182
 Ile Val Cys Asn Val Ser Leu Leu Phe Ile Gly Ile Asn Val Asp Ile
 1 5 10 15
 Leu Ser Phe Ser Phe Gln Cys Ser Leu Thr Leu Thr Ile His Tyr Cys
 20 25 30
 Asn Lys Gln Asn Leu Leu Ser Gln Glu Leu Ile Cys Ile Ser Phe Leu
 35 40 45
 Val Ile Ser
 50

<210> 6183
 <211> 98
 <212> PRT
 <213> S.epidermidis

<400> 6183
 Lys Ser Cys Lys Glu Val Ile Glu Met Asn Leu Glu Lys Ile Tyr Glu
 1 5 10 15
 Glu Ile Ser Asn Glu Ile Lys Ala Met Thr Asp Asp Glu Ile Lys Glu
 20 25 30
 Val Ser Asp Ile Leu Tyr Glu Ser Lys Leu Leu Asn Val Asp Tyr Ser
 35 40 45
 Asn Leu Lys Ser Phe Lys Ala Asp Thr Lys His Ser Tyr Lys Val Lys
 50 55 60
 Glu Asn Glu Tyr Asn Val Ile Glu Lys Asn Ile Asn Glu Lys Pro Asn
 65 70 75 80
 Leu Glu Asn His Glu Val Asn Gln Val Lys Asn Asn Asn Ile Ile Ile
 85 90 95
 Ala Ala

<210> 6184
 <211> 100
 <212> PRT

Val Gln Arg Lys Val Lys Asn Asp Leu Ile Lys Ala Leu Lys Lys Thr
 260 265 270
 Ile Thr Glu Phe Tyr Gly Glu Asn Ile Glu Lys Ser Pro Asp Phe Gly
 275 280 285
 Arg Ile Val Asn Gln Lys His Phe Asn Arg Leu Asn Asp Leu Ile Gln
 290 295 300
 Ile His Lys Asp Asn Val Val Phe Gly Gly Asn Ser Ser Lys Glu Asp
 305 310 315 320
 Leu Tyr Ile Glu Pro Thr Leu Leu Asp Asn Ile Thr Asn Asp Asn Lys
 325 330 335
 Ile Met Lys Glu Glu Ile Phe Gly Pro Ile Leu Pro Ile Ile Thr Tyr
 340 345 350
 Asp Asn Phe Asp Glu Val Leu Glu Ile Ile Gln Ser Lys Ser Lys Pro
 355 360 365
 Leu Ser Leu Tyr Leu Phe Ser Glu Asp Glu Asn Met Thr His Arg Val
 370 375 380
 Val Glu Glu Leu Ser Phe Gly Gly Gly Ala Ile Asn Asp Thr Leu Met
 385 390 395 400
 His Leu Ala Asn Pro Asn Leu Pro Phe Gly Gly Val Gly Ser Ser Gly
 405 410 415
 Ile Gly Gln Tyr His Gly Lys Tyr Ser Phe Asp Thr Phe Ser His Met
 420 425 430
 Lys Ser Tyr Thr Phe Lys Ser Thr Arg Leu Glu Ser Ser Leu Phe Phe
 435 440 445
 Pro Pro Tyr Lys Gly Lys Phe Lys Tyr Ile Lys Thr Phe Phe Lys Asn
 450 455 460

<210> 6186

<211> 74

<212> PRT

<213> S.epidermidis

<400> 6186

Ala Asn Ile Leu Val Val Trp Ala Thr Pro His Pro Phe Pro Leu Asn
 1 5 10 15
 Ile Tyr Phe Gly Thr Leu Ala Gly Gly Leu Gly Cys Phe Pro Phe Glu
 20 25 30
 His Gly Pro Tyr His Pro Cys Ser Asp Ser Gln Val Lys Leu Ile Gly
 35 40 45
 Ile Arg Ser Leu Ser Glu Phe Gly Asn Pro Arg Gly Ala Pro Arg Pro
 50 55 60
 Asn Ser Ala Leu Pro Pro Ile Ile Ile Thr
 65 70

<210> 6187

<211> 66

<212> PRT

<213> S.epidermidis

<400> 6187

Thr Thr Leu Asn Ser Ile Thr Leu Tyr Asn Ile Val Cys Gly Leu Phe
 1 5 10 15
 Ser Thr Met Leu Gln Phe Asn Cys Ile His Val Leu Tyr Tyr Thr Thr
 20 25 30
 Pro Ser Leu Val Pro Ala Asp Leu Gly Phe Phe Gly His Leu Phe Ala
 35 40 45

Phe Pro Phe Tyr Phe Gln Pro Asn Thr Lys Asp Asn Glu Tyr Ala Thr
 50 55 60
 Gly Asn
 65

<210> 6188
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 6188
 Leu Asn Asn Asn Tyr Lys Tyr Asn Leu Asn Ile Ser Leu Ile Tyr Ser
 1 5 10 15
 Val Asn Leu Phe Tyr Ser His Lys Lys Ile Ala Met Lys Lys Ser Ile
 20 25 30
 Asn Leu Asn Phe Phe Ile Ala Asn Phe Phe His Leu Asn Leu Leu Thr
 35 40 45
 Ala

<210> 6189
 <211> 195
 <212> PRT
 <213> S.epidermidis

<400> 6189
 Arg Phe Leu Asn Thr Tyr Trp Glu Ala Val Leu Met Ser Asn Lys Ala
 1 5 10 15
 Leu Ile Ile Val Asp Tyr Ser Phe Asp Phe Ile Asp Asp Asn Gly Lys
 20 25 30
 Leu Thr Cys Gly Lys Pro Gly Gln Glu Ile Glu Thr Phe Ile Thr Gln
 35 40 45
 Arg Ile Lys Asn Tyr His Asn Asn Gln Gln Glu Ile Phe Phe Leu Met
 50 55 60
 Asp Leu His Tyr Glu Asn Asp Lys Phe His Pro Glu Ser Lys Leu Phe
 65 70 75 80
 Pro Asn His Asn Ile His Gln Thr Pro Gly Arg Glu Leu Tyr Gly Glu
 85 90 95
 Val Gly Arg Leu Tyr Asn Ser Ile Lys Asp Gln Met Asn Val His Tyr
 100 105 110
 Leu Asp Lys Thr Arg Tyr Asp Ser Phe Tyr Gly Thr Pro Leu Asp Ser
 115 120 125
 Leu Leu Arg Glu Arg Gln Ile Asn Asp Ile Glu Ile Val Gly Val Cys
 130 135 140
 Thr Asp Ile Cys Ile Leu His Thr Ala Val Ser Ala Tyr Asn Leu Gly
 145 150 155 160
 Tyr Asn Ile Thr Ile Pro Ile Arg Gly Val Ala Ser Phe Asn Gln Asp
 165 170 175
 Gly His Gln Trp Ala Leu Ser His Phe Lys Asn Ser Leu Gly Ala Lys
 180 185 190
 Val Glu Glu
 195

<210> 6190
 <211> 56
 <212> PRT

<213> S.epidermidis

<400> 6190

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Thr Ser Leu Lys Asn Leu Ala Ile Leu Leu Ser Phe Thr Ala Pro Val
1           5           10           15
Leu Asn Lys Leu Asp Lys Asp Gln Ser Ser Leu Thr Ile Ser Phe Lys
           20           25           30
Lys Arg Tyr Leu Asn Ser Lys Phe Lys Phe Leu Leu Leu Ile Leu Lys
           35           40           45
Lys Thr Phe Phe Leu Leu Ser Leu
           50           55

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<210> 6191

<211> 128

<212> PRT

<213> S.epidermidis

<400> 6191

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Met Lys Ile Lys Gln Phe Ser Phe Gln His Ile Leu Phe Leu Ile Trp
1           5           10           15
Lys Lys Leu Gln Ile Ile Ser Phe Phe Leu Ser Glu Gly Glu Ile Ile
           20           25           30
Phe Asn Glu Ser Lys Asp Lys Leu Ser Gln Lys Tyr Gln Ile Leu Asn
           35           40           45
Gly Ser Asn Glu His Gly His Glu Glu Leu Asp Glu Leu Leu Ile Tyr
           50           55           60
Lys Glu Ser Lys Gln Thr Gly Tyr Ile Gly Leu Thr Glu Tyr Tyr Gln
65           70           75           80
Thr Phe Asn Glu Leu Phe Gly Ser Gly Val Glu Ile Lys Asp Ala Ser
           85           90           95
Ile Glu Gln Leu Met Ile Tyr Leu Glu Lys Ser Lys His Lys Arg Asn
           100          105          110
Thr Asn Ser Lys Tyr Lys Val Arg Phe Asn Tyr Glu Ala Ile Asn Asp
           115          120          125

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<210> 6192

<211> 47

<212> PRT

<213> S.epidermidis

<400> 6192

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Leu Phe Val Asn Asn Lys Ile Gln Glu Tyr Phe Tyr Phe Asn Tyr Tyr
1           5           10           15
Leu Ile Ile Lys Cys Lys Leu Lys Leu Tyr Pro Lys Pro Asn Lys Ile
           20           25           30
Ser Lys Phe Met Leu Val Gln Tyr Ser Cys Met Tyr Arg Leu Thr
           35           40           45

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<210> 6193

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6193

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Val Thr Ala Lys Pro Ser Phe Thr Ile Glu Pro Cys Gly Ser Ile Tyr
1           5           10           15

```

Tyr Pro Val Leu Ala Pro Val Ser Arg Ser Tyr Pro Ser Leu Ile Gly
 20 25 30
 Arg Leu Ser Thr Cys Tyr Ser Pro Val Arg Arg
 35 40

<210> 6194

<211> 540

<212> PRT

<213> S.epidermidis

<400> 6194

Thr Met Ala Lys Asp Leu Lys Phe Ser Glu Asp Ala Arg Gln Ala Met
 1 5 10 15
 Leu Arg Gly Val Asp Lys Leu Ala Asn Ala Val Lys Val Thr Ile Gly
 20 25 30
 Pro Lys Gly Arg Asn Val Val Leu Asp Lys Asp Tyr Thr Thr Pro Leu
 35 40 45
 Ile Thr Asn Asp Gly Val Thr Ile Ala Lys Glu Ile Glu Leu Glu Asp
 50 55 60
 Pro Tyr Glu Asn Met Gly Ala Lys Leu Val Gln Glu Val Ala Asn Lys
 65 70 75 80
 Thr Asn Glu Ile Ala Gly Asp Gly Thr Thr Thr Ala Thr Val Leu Ala
 85 90 95
 Gln Ser Met Ile Gln Glu Gly Leu Lys Asn Val Thr Ser Gly Ala Asn
 100 105 110
 Pro Val Gly Leu Arg Gln Gly Ile Asp Lys Ala Val Gln Val Ala Ile
 115 120 125
 Glu Ala Leu His Glu Ile Ser Gln Lys Val Glu Asn Lys Asn Glu Ile
 130 135 140
 Ala Gln Val Gly Ala Ile Ser Ala Ala Asp Glu Glu Ile Gly Arg Tyr
 145 150 155 160
 Ile Ser Glu Ala Met Asp Lys Val Gly Asn Asp Gly Val Ile Thr Ile
 165 170 175
 Glu Glu Ser Asn Gly Phe Asn Thr Glu Leu Glu Val Val Glu Gly Met
 180 185 190
 Gln Phe Asp Arg Gly Tyr Gln Ser Pro Tyr Met Val Thr Asp Ser Asp
 195 200 205
 Lys Met Ile Ala Glu Leu Glu Arg Pro Tyr Ile Leu Val Thr Asp Lys
 210 215 220
 Lys Ile Ser Ser Phe Gln Asp Ile Leu Pro Leu Leu Glu Gln Val Val
 225 230 235 240
 Gln Ala Ser Arg Pro Ile Leu Ile Val Ala Asp Glu Val Glu Gly Asp
 245 250 255
 Ala Leu Thr Asn Ile Val Leu Asn Arg Met Arg Gly Thr Phe Thr Ala
 260 265 270
 Val Ala Val Lys Ala Pro Gly Phe Gly Asp Arg Arg Lys Ala Met Leu
 275 280 285
 Glu Asp Leu Ala Ile Leu Thr Gly Ala Gln Val Ile Thr Asp Asp Leu
 290 295 300
 Gly Leu Glu Leu Lys Asp Ala Ser Leu Asp Met Leu Gly Thr Ala Asn
 305 310 315 320
 Lys Val Glu Val Thr Lys Asp His Thr Thr Val Val Asp Gly Asn Gly
 325 330 335
 Asp Glu Asn Asn Ile Asp Ala Arg Val Gly Gln Ile Lys Ala Gln Ile
 340 345 350
 Glu Glu Thr Asp Ser Glu Phe Asp Lys Glu Lys Ile Thr Glu Ser Leu

355 360 365
 Gly Lys Leu Pro Gly Gly Val Ala Val Asn Gln Val Trp Gly Gly Ser
 370 375 380
 Glu Thr Glu Leu Lys Glu Arg Lys Leu Arg Ile Glu Asp Ala Leu Asn
 385 390 395 400
 Ser Thr Arg Ala Ala Val Glu Glu Gly Ile Val Ala Gly Gly Gly Thr
 405 410 415
 Ala Leu Val Asn Ile Tyr Gln Lys Val Ser Glu Ile Lys Ala Glu Gly
 420 425 430
 Asp Val Glu Thr Gly Val Asn Ile Val Leu Lys Ala Leu Gln Ala Pro
 435 440 445
 Val Arg Gln Ile Ala Glu Asn Ala Gly Leu Glu Gly Ser Ile Ile Val
 450 455 460
 Glu Arg Leu Lys His Ala Glu Ala Gly Val Gly Phe Asn Ala Ala Thr
 465 470 475 480
 Asn Glu Trp Val Asn Met Leu Glu Glu Gly Ile Val Asp Pro Thr Lys
 485 490 495
 Val Thr Arg Ser Ala Leu Gln His Ala Ala Ser Val Ala Ala Met Phe
 500 505 510
 Leu Thr Thr Glu Ala Val Val Ala Ser Ile Pro Glu Pro Glu Asn Asn
 515 520 525
 Glu Gln Pro Gly Met Gly Gly Met Pro Gly Met Met
 530 535 540

<210> 6195
 <211> 117
 <212> PRT
 <213> S.epidermidis

<400> 6195
 Asn Asn Lys Lys Tyr Ser Gly Gly Leu Ile Leu Lys Ile Val Ser Leu
 1 5 10 15
 Asn Arg Leu Asn Glu Ile Glu Asn Glu Leu Arg Lys Gln Phe Pro Asn
 20 25 30
 Glu Glu Phe Lys Phe Tyr Asp Lys Ala Ile Asn Ile Pro Ile Asn Asp
 35 40 45
 Arg Lys Thr Met Asp Ile Leu Ile Gly Tyr Asp Gly Lys Ile Asp Arg
 50 55 60
 Thr Phe Ile Glu His Cys Ile Asn Leu Lys Trp Ile Gly Trp Phe Ala
 65 70 75 80
 Thr Gly Val Asn Asn Leu Pro Leu Asn Tyr Ile Lys Glu Arg Asp Ile
 85 90 95
 Ile Leu Arg Asn Gly Lys Gly Ile Gln Ala Lys Gln Val Ser Glu Tyr
 100 105 110
 Ile Lys Thr Phe Ile
 115

<210> 6196
 <211> 279
 <212> PRT
 <213> S.epidermidis

<400> 6196
 Arg Met Lys Lys Leu Phe Ile Ser Gly Leu Ile Ile Phe Ile Ile Phe
 1 5 10 15
 Phe Ala Ser Gly Ala Met Thr Trp Phe Thr Ile Asp Lys Asn Lys Tyr

```

      20      25      30
Asp Asn Arg His Tyr Thr Lys Thr Ile Asn Ser Lys Ile Glu His Leu
      35      40      45
Ser Ile Ser Thr Val Thr Thr Asn Val Asn Ile Ile Ser Gly Lys Lys
      50      55      60
Leu Ala Val Tyr Phe Thr Gly Asp Asn Lys Ile Asn Val Thr Lys Asn
65      70      75      80
Asn Lys Arg Leu Ser Ile Lys Glu Lys Arg Ala Val Asp Arg Gly Tyr
      85      90      95
Gly Leu Asn Phe Asn Pro Phe His Ser Asn Asn Arg Lys Leu Thr Ile
      100      105      110
Val Val Pro Glu Lys Asp Leu Lys Ser Leu Asn Ile Gln Ser Leu Leu
      115      120      125
Gly Glu Ile Asp Leu Asn Gln Val Asn Leu Lys His Val Ser Leu Glu
      130      135      140
Thr Asp Arg Ile Ile Gln Leu Lys Arg Ser Glu Leu Asn Gln Val Asn
145      150      155      160
Ile Glu Ser Ser Lys Ala Asn Phe Tyr Ile Thr Asp Cys Leu Ile Arg
      165      170      175
Glu Gly Arg Met Lys Leu Asp Lys Gly Ile Thr His Val Lys Asn Ser
      180      185      190
Thr Leu Ser Asp Thr Val Phe Leu Val Asn Arg Gly Asp Ile Ser Met
      195      200      205
Thr Asp Met Lys Ser Asn Asn Asp Ile Lys Ala Ser Thr Gln Arg Gly
      210      215      220
Asn Ile Asn Tyr His Phe Gly Glu Lys Pro Lys Asn Thr Leu Leu Lys
225      230      235      240
Leu His Pro Gly His Gly Asn Lys Glu Ile Lys Asn Arg Tyr Phe Asp
      245      250      255
Lys Gly Lys Val Gly Asn Ser Asp Asn Ile Leu Glu Phe Tyr Thr Val
      260      265      270
Asp Gly Asp Ile Lys Ile Glu
      275

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<210> 6197
 <211> 53
 <212> PRT
 <213> S.epidermidis

<400> 6197
 Ile Ile Arg Lys Cys Leu Ile Phe Leu Glu Tyr Phe Asn Val Lys Leu
 1 5 10 15
 His Ile Arg Ala Lys Tyr Phe Gly Glu Thr His Glu Gly Thr Gly Gln
 20 25 30
 Ala Glu Asp Leu Tyr Arg Leu Lys Leu Ser His Lys Lys Ala Ser Gln
 35 40 45
 Gln Tyr Lys Val Leu
 50

<210> 6198
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6198
 Ile Ile Arg Lys Gly Leu Ile Phe Leu Lys Tyr Phe Asn Val Lys Leu

2717

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1           5           10           15
His Met Asn Thr Lys Tyr Phe Gly Glu Thr Leu Glu Gly Thr Gly Gln
           20           25           30
Ala Glu Asp Tyr Arg Leu Lys Leu Ser Pro Lys Lys Ala Ser Gln Gln
           35           40           45
Tyr Glu Val Leu
           50

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<210> 6199

<211> 213

<212> PRT

<213> S.epidermidis

<400> 6199

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Glu Lys Arg Asn Asn Met Ser Ala Ile Ala Gln Asn Pro Trp Leu Met
1           5           10           15
Val Leu Ala Ile Phe Ile Ile Asn Val Cys Tyr Val Thr Phe Leu Thr
           20           25           30
Met Arg Thr Ile Leu Thr Leu Lys Gly Tyr Arg Tyr Val Ala Ala Val
           35           40           45
Val Ser Phe Met Glu Val Leu Val Tyr Val Val Gly Leu Gly Leu Val
           50           55           60
Met Ser Ser Leu Asp Gln Ile Gln Asn Ile Phe Ala Tyr Ala Leu Gly
65           70           75           80
Phe Ser Val Gly Ile Ile Val Gly Met Lys Ile Glu Glu Lys Leu Ala
           85           90           95
Leu Gly Tyr Thr Val Val Asn Val Thr Ser Ser Glu Tyr Glu Leu Asp
           100           105           110
Leu Pro Asn Glu Leu Arg Asn Leu Gly Tyr Gly Val Thr His Tyr Glu
           115           120           125
Ala Phe Gly Arg Asp Gly Ser Arg Met Val Met Gln Ile Leu Thr Pro
           130           135           140
Arg Lys Tyr Glu Leu Lys Leu Met Asp Thr Val Lys Asn Leu Asp Pro
145           150           155           160
Lys Ala Phe Ile Ile Ala Tyr Glu Pro Arg Asn Ile His Gly Gly Phe
           165           170           175
Trp Val Lys Gly Val Arg Lys Arg Lys Leu Lys Ala Tyr Glu Pro Glu
           180           185           190
Gln Leu Glu Val Val Val Asp His Glu Glu Ile Val Gly Gly Ser Ser
           195           200           205
Asn Glu Gln Lys Val
           210

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<210> 6200

<211> 191

<212> PRT

<213> S.epidermidis

<400> 6200

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Thr Val Ile Glu Pro Tyr Asn Lys Tyr Arg Ser Glu Asn Met Lys Ile
1           5           10           15
Phe Lys Leu Thr Ser Leu Thr Leu Ala Ala Leu Thr Leu Ala Phe Pro
           20           25           30
Phe Ser His Val Ala Gln Ala His Thr Tyr Leu Glu Lys His His Gln
           35           40           45
Thr Asn Glu Thr Lys Gln Ser His Ser Phe Ser Leu Glu Gly Glu Ala

```

6199 6200

50		55		60
Gly 65	Glu Asn Pro Thr Phe 70	Leu Thr Gln Pro Gln 75	Phe Ile Asn Ser Leu 80	
Asp 85	Asn Gly His Leu Asn Ile Asn Gly Tyr 90	Gln Ile Gln Gln Asp 95		
Thr 100	Asn Asp Ile Glu Tyr Lys Lys Val 105	Tyr Asp Gln Glu Ile Arg Ala 110		
Thr 115	Ser Asn His Thr Ala Ile Ser Val Arg Phe Ser 125	Ile Asn Asn Gln		
Ser 130	Leu Ser Leu Glu Ser Met Lys Asp Ala Tyr Pro Asn Glu Arg Leu 140			
Asn 145	His Ile Pro His Thr Ser Asn Asp Ser Gln Tyr Pro Glu Asp Gly 160			
Ile 165	Tyr Val Tyr His Gly Lys Met Ile Lys Leu Gln Tyr Lys Val Thr 175			
His 180	Gly Phe Val Thr Ser Val Thr Ile Gly Glu Gly Val Asp Glu 190			

<210> 6201

<211> 143

<212> PRT

<213> S.epidermidis

<400> 6201

Asn 1	Asp 5	Asp 10	Glu 15	Val 20	Val 25	Asn 30	Met 35	Ile 40	Pro 45	Asn 50	Pro 55	Asn 60	Ala 65	Pro 70	Asp 75
Glu 80	Tyr 85	Lys 90	Tyr 95	Glu 100	Thr 105	Asp 110	Tyr 115	Arg 120	Lys 125	Ile 130	Pro 135	Arg 140	Lys 145	Tyr 150	Leu 155
Asn 160	Pro 165	Lys 170	Ile 175	Pro 180	Gln 185	Gly 190	Arg 195	Gly 200	Lys 205	Ile 210	Lys 215	Trp 220	Gln 225	Ala 230	Phe 235
Ala 240	Thr 245	Leu 250	Pro 255	Gln 260	Gln 265	Phe 270	Glu 275	Ile 280	Leu 285	Glu 290	Gln 295	Ile 300	Ile 305	Lys 310	Asp 315
Gln 320	Asn 325	Lys 330	Ile 335	Glu 340	Lys 345	Pro 350	Leu 355	Leu 360	Thr 365	His 370	Asp 375	Ser 380	Leu 385	Asp 390	Asn 395
Leu 400	Asp 405	Gln 410	Ile 415	Phe 420	Gln 425	Ile 430	Lys 435	Ile 440	Gln 445	Asn 450	Asp 455	Glu 460	Leu 465	Cys 470	Thr 475
Ile 480	Ser 485	Tyr 490	Trp 495	Glu 500	Asp 505	Gly 510	Asn 515	Ile 520	Ser 525	Lys 530	Tyr 535	Thr 540	Gly 545	Lys 550	Ile 555
Leu 560	Lys 565	Lys 570	Asp 575	Glu 580	Ile 585	Ser 590	Asn 595	Thr 600	Phe 605	Ser 610	Phe 615	Ser 620	Asp 625	Thr 630	Asn 635
Asn 640	Asn 645	Ile 650	Tyr 655	Asn 660	Leu 665	Asn 670	Asn 675	Ala 680	Asn 685	Val 690	Cys 695	Ser 700	Ile 705	Thr 710	

<210> 6202

<211> 430

<212> PRT

<213> S.epidermidis

<400> 6202

Asp 1	Met 5	Asp 10	Asp 15	Ile 20	Asn 25	Leu 30	Phe 35	Pro 40	Phe 45	Ala 50	Gly 55	Leu 60	Gln 65	Ile 70	Phe 75
Leu 80	Met 85	Ile 90	Trp 95	Val 100	Thr 105	Lys 110	Val 115	Ile 120	Ile 125	Asn 130	Met 135	Lys 140	Phe 145	Asn 150	Phe 155
Arg 160	Asp 165	Tyr 170	Ile 175	Ile 180	Val 185	Phe 190	Thr 195	Ile 200	Val 205	Ile 210	Pro 215	Ser 220	Ala 225	Ile 230	Met 235
Tyr 240	Tyr 245	Phe 250	Trp 255	Gln 260	Ser 265	Lys 270	Ala 275	Leu 280	Ile 285	Val 290	Leu 295	Val 300	Ile 305	Ile 310	Ile 315

50		55		60
Ile Ile Phe Phe Tyr Thr Lys Ile Lys Leu Tyr Ser Ile Leu Val Val				
65		70		75
Leu Phe Thr Thr Met Ile Leu Tyr Ile Thr Asn Phe Ile Thr Val Tyr				80
	85		90	
Ile His Leu Thr Ile Lys Asp Tyr Ile Pro Phe Lys Phe Val Leu Gln				95
	100		105	
Leu Ile His Phe Thr Phe Phe Val Ile Ile Thr Leu Ile Ile Ala Tyr				110
	115		120	
Leu Thr Gln Leu Leu Phe Asn Lys Leu Lys Val Ser Tyr Leu Ser Leu				125
	130		135	
Asn Lys Arg Tyr Leu Phe Ile Ile Thr Ile Val Leu Phe Ile Ser Phe				140
145		150		155
Ile Leu Leu Tyr Met Val Ser Gln Thr Asp Met Arg Gly Asn Asp Thr				160
	165		170	
Leu Lys Leu Tyr Ala Ile Leu Leu Met Gly Ile Met Val Phe Leu Ser				175
	180		185	
Val Val Ile Leu Val Met Ser Asn Phe Thr Leu Arg Glu Met Arg Tyr				190
	195		200	
Lys Arg Asn Val Lys Glu Ile Glu Ala Tyr Tyr Glu Tyr Thr Leu Arg				205
	210		215	
Ile Glu Ser Ile Asn Asn Glu Met Arg Lys Phe Arg His Asp Tyr Val				220
225		230		235
Asn Ile Leu Thr Thr Leu Ser Asp Tyr Ile Arg Glu Asp Asp Met Pro				240
	245		250	
Gly Leu Arg Lys Tyr Phe Asn Glu Asn Ile Val Pro Met Lys Asp Lys				255
	260		265	
Leu Lys Thr Arg Ser Ile Lys Met Asn Gly Ile Glu Lys Leu Lys Val				270
	275		280	
Arg Glu Ile Lys Gly Leu Ile Thr Thr Lys Ile Ile Gln Ala Gln Glu				285
	290		295	
Lys Arg Ile Pro Ile Ser Ile Glu Val Pro Asp Glu Ile Asp Arg Ile				300
305		310		315
Asp Met Asn Thr Val Glu Leu Ser Arg Ile Ile Gly Ile Ile Val Asp				320
	325		330	
Asn Ala Ile Glu Ala Ser Glu Asn Leu Glu Glu Pro Leu Ile Asn Ile				335
	340		345	
Ala Phe Ile Asp Asn Glu Glu Ala Val Thr Phe Ile Val Met Asn Lys				350
	355		360	
Cys Ser Asp Asp Ile Pro Lys Ile His Glu Leu Phe Glu Gln Gly Phe				365
	370		375	
Ser Thr Lys Gly Asp Asn Arg Gly Leu Gly Leu Ser Thr Leu Lys Glu				380
385		390		395
Leu Thr Asp Ser Asn Glu Asn Val Leu Leu Asp Thr Val Ile Glu Asn				400
	405		410	
Gly Tyr Phe Val Gln Lys Val Glu Ile Asn Asn Lys Glu Ser				415
	420		425	
				430

<210> 6203

<211> 363

<212> PRT

<213> S.epidermidis

<400> 6203

Cys	Leu	Arg	Phe	Ile	Ile	His	Trp	Arg	Arg	Arg	Gly	Asp	Leu	Gln	Met
1				5				10					15		

Asn His Tyr Ile Arg Ala Ile Gly Ser Met Leu Ile Leu Val Tyr Ser
 20 25 30
 Met Leu Ile Ala Phe Leu Phe Ile Asp Lys Val Phe Val Asn Ile Ile
 35 40 45
 Phe Phe Gln Gly Met Phe Tyr Thr Gln Ile Phe Gly Ile Pro Val Phe
 50 55 60
 Leu Phe Leu Asn Leu Leu Ile Val Leu Leu Cys Ile Ile Val Gly Ser
 65 70 75 80
 Val Leu Ala Tyr Lys Ile Asn Gln Gln Asn Asp Trp Ile Ile Ser Gln
 85 90 95
 Ile Glu Arg Ser Ile Glu Gly Gln Thr Val Gly Ile Asn Asp Gln Asn
 100 105 110
 Ile Glu Leu Tyr Thr Glu Thr Ile Asp Ile Tyr His Thr Leu Val Pro
 115 120 125
 Leu Asn Gln Glu Leu His Arg Leu Arg Met Lys Thr Gln Asn Leu Thr
 130 135 140
 Asn Glu Asn Tyr Asn Ile Asn Asp Val Lys Val Lys Lys Ile Ile Glu
 145 150 155 160
 Asp Glu Arg Gln Arg Leu Ala Arg Glu Leu His Asp Ser Val Ser Gln
 165 170 175
 Gln Leu Phe Ala Ala Ser Met Met Leu Ser Ala Ile Lys Glu Ser Lys
 180 185 190
 Leu Glu Pro Pro Leu Asn Gln Gln Ile Pro Ile Leu Glu Lys Met Val
 195 200 205
 Gln Asp Ser Gln Leu Glu Met Arg Ala Leu Leu Leu His Leu Arg Pro
 210 215 220
 Ile Gly Leu Lys Asp Lys Ser Leu Gly Glu Gly Ile Lys Asp Leu Val
 225 230 235 240
 Ile Asp Leu Gln Lys Lys Val Pro Met Lys Val Val His Glu Ile Gln
 245 250 255
 Asp Phe Glu Val Pro Lys Gly Ile Glu Asp His Leu Phe Arg Ile Thr
 260 265 270
 Gln Glu Ala Ile Ser Asn Thr Leu Arg His Ser Asn Gly Thr Lys Val
 275 280 285
 Thr Val Glu Leu Phe Asn Gln Glu Asp Tyr Leu Leu Leu Arg Ile Gln
 290 295 300
 Asp Asn Gly Lys Gly Phe Asn Val Asp Glu Lys Phe Glu Gln Ser Tyr
 305 310 315 320
 Gly Leu Lys Asn Met Arg Glu Arg Ala Leu Glu Ile Gly Ala Thr Phe
 325 330 335
 His Ile Val Ser Leu Pro Asp Ser Gly Thr Arg Ile Glu Val Lys Ala
 340 345 350
 Pro Leu Asn Lys Glu Glu Asn Ser Ser Gly Asp
 355 360

<210> 6204

<211> 157

<212> PRT

<213> S.epidermidis

<400> 6204

Glu Ile Gly Glu Tyr Met Ile Ser Lys Gly Glu Gln Phe Pro Ser Phe
 1 5 10 15
 Ser Leu Glu Asn Gln Asp Gly Asn Phe Ile Ser Asn Glu Thr Ile Lys
 20 25 30
 Gly Arg Lys Thr Ile Leu Tyr Phe Tyr Pro Arg Asp Asn Thr Pro Thr

	35					40						45					
Cys	Thr	Thr	Glu	Ala	Cys	Glu	Phe	Arg	Asp	His	Ile	Glu	Asp	Phe	Asn		
	50					55					60						
Gln	Leu	Asp	Val	Asp	Ile	Tyr	Gly	Ile	Ser	Ala	Asp	Ser	Lys	Lys	Lys		
65					70					75					80		
His	Gln	Asn	Phe	Ile	Lys	Lys	His	Gln	Leu	Asn	Phe	Asp	Leu	Leu	Val		
				85					90					95			
Asp	Lys	Asp	Tyr	Gln	Leu	Ala	Asn	Lys	Val	Gly	Val	Tyr	Gln	Leu	Lys		
			100					105					110				
Lys	Ser	Phe	Gly	Lys	Glu	Asn	Met	Gly	Ile	Val	Arg	Thr	Thr	Phe	Ile		
		115					120					125					
Leu	Asp	Glu	Asn	Gly	Asn	Ile	Ile	Asp	Val	Ile	Glu	Lys	Val	Lys	Val		
	130					135					140						
Lys	Thr	Gln	Ile	Glu	Thr	Ile	Lys	Asn	Ile	Leu	Glu	Gly					
145					150					155							

<210> 6205

<211> 342

<212> PRT

<213> S.epidermidis

<400> 6205

Ser	Leu	Phe	Glu	Phe	Pro	Phe	Leu	Lys	Arg	Ser	Gln	Tyr	Asp	Met	Asn		
1				5					10					15			
Asp	Lys	Trp	Tyr	Arg	His	Ile	Ile	Gly	Ala	Arg	Thr	Ile	Lys	Thr	Gly		
			20					25					30				
Leu	Ala	Thr	Phe	Phe	Thr	Ser	Leu	Phe	Cys	Met	Leu	Leu	Asn	Leu	Thr		
		35					40					45					
Pro	Ile	Phe	Ala	Ile	Leu	Thr	Ala	Ile	Val	Thr	Ile	Glu	Pro	Thr	Ala		
	50					55					60						
Lys	Ala	Ser	Leu	Lys	Lys	Gly	Tyr	Lys	Arg	Leu	Pro	Ala	Thr	Val	Ile		
65				70					75						80		
Gly	Ala	Leu	Phe	Ala	Val	Val	Phe	Thr	Tyr	Val	Phe	Gly	Asp	Gln	Ser		
			85					90						95			
Pro	Leu	Ser	Tyr	Ala	Leu	Ser	Ala	Thr	Phe	Thr	Ile	Leu	Ile	Cys	Thr		
			100				105					110					
Lys	Leu	Asn	Leu	Gln	Val	Gly	Thr	Thr	Val	Ala	Val	Leu	Thr	Ser	Val		
		115				120						125					
Ala	Met	Ile	Pro	Gly	Ile	His	Glu	Ala	Tyr	Val	Phe	Asn	Phe	Phe	Ser		
	130				135						140						
Arg	Leu	Leu	Thr	Ala	Leu	Ile	Gly	Leu	Val	Thr	Ala	Gly	Leu	Val	Asn		
145					150					155					160		
Phe	Ile	Ile	Leu	Pro	Lys	Tyr	Tyr	His	Gln	Leu	Glu	Glu	Gln	Leu			
			165					170					175				
Ala	Leu	Ser	Glu	Lys	Lys	Met	Tyr	Arg	Leu	Phe	Tyr	Glu	Arg	Cys	Asn		
			180					185					190				
Glu	Leu	Leu	Gly	Lys	Phe	Ser	Ser	Glu	Lys	Thr	Ser	Lys	Glu	Leu			
		195				200						205					
Ser	Lys	Leu	Asn	Ile	Ile	Ala	Gln	Lys	Val	Glu	Thr	Leu	Met	Ser	Tyr		
	210					215					220						
Gln	Arg	Asp	Glu	Leu	His	Tyr	His	Lys	Asn	Glu	Asp	Asn	Trp	Lys	Leu		
225					230					235					240		
Leu	Asn	Arg	Leu	Thr	Asn	Arg	Ala	Tyr	Asn	Asn	Arg	Leu	Phe	Ile	Ser		
			245					250					255				
His	Leu	Ser	Asn	Ile	Ile	Tyr	Leu	Pro	Lys	His	Thr	Ser	Ile	Ala	Phe		
			260					265					270				

Asp Ala Asn Glu Lys Ile Ala Leu Ile Asn Ile Ser Asn Ser Ile Asn
 275 280 285
 Gly Ile Ile Gln Lys Gly Ser Phe Ala Arg Gln Lys Lys Ser Ile Ala
 290 295 300
 Thr Leu Lys Ser Ser Val Lys Gln Met Asp Glu Phe Asp Gln Asn Gln
 305 310 315 320
 Met Lys Ser Thr Leu Ile Tyr Glu Ile Leu Leu Ile Tyr Lys Ile Leu
 325 330 335
 Asp Ser Arg Tyr Ala Lys
 340

<210> 6206
 <211> 104
 <212> PRT
 <213> S.epidermidis

<400> 6206
 Gly Leu Phe Glu Met Gln Ile Glu Lys Leu Arg Gly Gln Ser Leu Asp
 1 5 10 15
 Glu Leu Phe Asp Ala Ile Leu Ala Leu Glu Asn Arg Glu Glu Cys Tyr
 20 25 30
 Gln Phe Phe Asp Asp Leu Cys Thr Val Asn Glu Ile Gln Ser Leu Ser
 35 40 45
 Gln Arg Leu Gln Val Ala Lys Met Ile Lys Gln Gly Tyr Thr Tyr Ala
 50 55 60
 Thr Ile Glu Glu Glu Ser Gly Ala Ser Thr Ala Thr Ile Ser Arg Val
 65 70 75 80
 Lys Arg Ser Leu Gln Trp Gly Asn Asp Ala Tyr Thr Met Ile Leu Asp
 85 90 95
 Arg Leu Asn Ile Glu Thr Lys Ala
 100

<210> 6207
 <211> 423
 <212> PRT
 <213> S.epidermidis

<400> 6207
 Asp Ser Leu Asp Lys Ile Trp Arg Ile Asn Met Thr Asn Tyr His Asn
 1 5 10 15
 Lys Leu Lys Gln Tyr Ala Glu Leu Leu Val Arg Val Gly Met Asn Val
 20 25 30
 Gln Pro Gln Gln Pro Val Phe Ile Arg Ser Ser Val Glu Ala Leu Glu
 35 40 45
 Leu Thr His Leu Ile Val Glu Glu Ala Tyr Lys Ala Gly Ala Glu Asp
 50 55 60
 Val Arg Val Ser Tyr Thr Asp Pro Lys Leu Lys Arg Leu Lys Phe Glu
 65 70 75 80
 Asn Glu Ser Val Glu His Phe Glu Lys Gln Glu Leu Lys Gln Tyr Asp
 85 90 95
 Ile Glu Glu Arg Leu Asp Tyr Val Asn Arg Gly Ala Ala Asn Leu Ala
 100 105 110
 Leu Ile Ala Glu Asp Pro Glu Leu Leu Asn Gly Ile Asp Ala Gln Lys
 115 120 125
 Leu Lys Ala Tyr Gln Thr Val Tyr Ser Lys Gly Phe Lys Pro Tyr Met
 130 135 140

Glu Ala Ser Gln Lys Asn Gln Phe Pro Trp Val Val Ala Ala Phe Pro
 145 150 155 160
 Thr Arg Asp Trp Ala Arg Arg Val Tyr Pro Glu Leu Asp Val Glu Ser
 165 170 175
 Ala Tyr Ile Lys Phe Ile Asp Glu Val Phe Asp Ile Val Arg Val Asp
 180 185 190
 Gly Gln Asn Pro Ile Glu Asn Trp Glu Lys His Ile Lys Asp Leu Ser
 195 200 205
 Val His Ala Lys Arg Leu Gln Glu Lys Asn Tyr Gln Ala Leu His Tyr
 210 215 220
 Ile Ser Glu Gly Thr Asp Leu Ile Val Gly Leu Pro Lys Gly His Ile
 225 230 235 240
 Trp Glu Asp Ala Thr Ser Tyr Val Asn Gly Asp Gly Gln Pro Phe Ile
 245 250 255
 Ala Asn Ile Pro Thr Glu Glu Val Phe Thr Ala Pro Asp Arg Asn Asn
 260 265 270
 Val Asn Gly Tyr Val Thr Asn Lys Leu Pro Leu Asn Leu Asn Gly Asn
 275 280 285
 Ile Ile Asp Gly Phe Thr Leu Thr Phe Lys Asp Gly Val Ile Ile Asp
 290 295 300
 Val Lys Ala Glu Lys Gly Glu Lys Leu Leu Lys Asp Leu Ile Ala Thr
 305 310 315 320
 Asp Glu Gly Ala Cys Arg Leu Gly Glu Val Ala Leu Val Pro Asp Asp
 325 330 335
 Ser Pro Ile Ser Asn Arg Arg Thr Ile Phe Tyr Asn Thr Leu Phe Asp
 340 345 350
 Glu Asn Ala Ser Cys His Leu Ala Ile Gly Ser Ala Tyr Ser Phe Asn
 355 360 365
 Ile Lys Gly Gly Thr Glu Met Thr Thr Glu Glu Lys Ile Ala Asn Gly
 370 375 380
 Leu Asn Asp Ser Asn Ile His Glu Asp Phe Met Ile Gly Ser Pro Asp
 385 390 395 400
 Leu Thr Ile Tyr Gly Ile Leu Gln Asp Glu Thr Lys Glu Leu Val Phe
 405 410 415
 Lys Asn Gly Asn Trp Ala Lys
 420

<210> 6208

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6208

Leu Arg Ile Glu Cys Pro Thr Thr Pro Thr Ser Lys Leu Val Gly Leu
 1 5 10 15
 Gly Ser Ser Arg Phe Ala Arg Arg Tyr Ser Gly Asn Arg Phe Phe Phe
 20 25 30
 Leu Phe Leu Arg Val Leu Arg Cys Phe Ser Ser Pro Gly Leu Pro Ser
 35 40 45
 Asp Met Leu
 50

<210> 6209

<211> 54

<212> PRT

<213> S.epidermidis

<400> 6209

Tyr Leu Ile Glu Cys Leu Arg Val Leu Glu Val Glu Thr Leu Thr Phe
 1 5 10 15
 Val Ser Phe Ile Phe Lys Val Tyr Thr Asn Ala Met Cys Gln Pro Leu
 20 25 30
 Phe Ile Phe Lys Leu Leu Gly Gly Lys Ala His Asp Lys Thr Ile Phe
 35 40 45
 Lys Val Cys Lys Thr Leu
 50

<210> 6210

<211> 355

<212> PRT

<213> S.epidermidis

<400> 6210

Met Leu Ile Asp Lys Ala Arg Ser Phe Ile Gln Thr Met Tyr Ser Glu
 1 5 10 15
 Leu Lys Tyr Asn Thr Asn Glu Val Glu Asn Arg Met Lys Glu Ile Glu
 20 25 30
 Gln Glu Ile Asn Leu Thr Gly Ser Tyr Thr His Thr Tyr Glu Glu Leu
 35 40 45
 Ser Tyr Gly Ala Lys Met Ala Trp Arg Asn Ser Asn Arg Cys Ile Gly
 50 55 60
 Arg Leu Phe Trp Gly Ser Leu Asn Val Lys Asp Ala Arg Asp Val Cys
 65 70 75 80
 Asp Glu Lys Glu Phe Ile Lys Phe Ile His Thr His Ile Lys Glu Ala
 85 90 95
 Thr Asn Gly Gly Lys Ile Lys Pro Tyr Ile Thr Ile Phe Ser Pro Glu
 100 105 110
 Asp Thr Pro Lys Ile Tyr Asn Asn Gln Leu Ile Arg Tyr Ala Gly Tyr
 115 120 125
 Glu Asn Val Gly Asp Pro Ser Glu Lys Lys Val Thr Arg Leu Ala Glu
 130 135 140
 His Leu Gly Trp Lys Gly Lys Gly Ser Asn Phe Asp Ile Leu Pro Leu
 145 150 155 160
 Ile Tyr Gln Leu Pro Asn Asp Thr Ile Lys Ile His Glu Leu Pro Ser
 165 170 175
 Asp Ile Val Lys Glu Val Ser Ile His His Glu His Tyr Pro Lys Leu
 180 185 190
 Ser Lys Leu Gly Leu Lys Trp Tyr Ala Val Pro Ile Ile Ser Asn Met
 195 200 205
 Asp Leu Lys Ile Gly Gly Ile Thr Tyr Pro Thr Ala Pro Phe Asn Gly
 210 215 220
 Trp Tyr Met Val Thr Glu Ile Ala Val Arg Asn Phe Thr Asp Thr Tyr
 225 230 235 240
 Arg Tyr Asn Leu Leu Glu Lys Val Ala Glu Ala Phe Glu Phe Asp Thr
 245 250 255
 Leu Lys Asn Asn Ser Phe Asn Lys Asp Arg Ala Leu Val Glu Leu Asn
 260 265 270
 His Ala Val Tyr His Ser Phe Lys Ala Asp Gly Val Ser Ile Val Asp
 275 280 285
 His Leu Thr Ala Ala Lys Gln Phe Glu Met Phe Glu Arg Asn Glu His
 290 295 300
 Gln Gln Asn Arg Asp Val Thr Gly Lys Trp Ser Trp Leu Ala Pro Pro

305 310 315 320
 Leu Ser Pro Thr Leu Thr Ser Asn Tyr His His Gly Tyr Asp Asn Thr
 325 330 335
 Met His His Thr Asn Phe Phe Tyr Lys Lys Glu Glu Pro Met Lys Cys
 340 345 350
 Pro Phe His
 355

<210> 6211
 <211> 105
 <212> PRT
 <213> S.epidermidis

<400> 6211
 Phe Val Ile Glu Gln Tyr Phe Leu Arg Asp Gly Lys Phe Val Gln Asp
 1 5 10 15
 Val Asp Met Lys Asp Gly Gly Pro Glu Asp Ser Thr Ile Leu Thr Leu
 20 25 30
 Gln Lys Asp Asp Phe Asn Lys Ala Leu Asp Ser Leu Ser Glu Asn Phe
 35 40 45
 Lys Val Gln Gln Ser Gln Lys Glu Ser Gly Glu Ile Ile Ile Lys Ala
 50 55 60
 Gln Asn Asp Tyr Arg Glu Leu Leu Lys Ser Leu Ser Gln Leu Asp Ile
 65 70 75 80
 Tyr Pro Lys Tyr Ile Glu Thr Arg Lys Ser Ser Leu Arg Asp Thr Tyr
 85 90 95
 Phe Asn Ile Asn Gln Arg Gly Asp Lys
 100 105

<210> 6212
 <211> 247
 <212> PRT
 <213> S.epidermidis

<400> 6212
 Asn Glu Gln Asp Lys Lys Asn Phe Tyr Lys Gln Ile Lys Lys Lys Glu
 1 5 10 15
 Val Cys Ile Met Thr Thr Thr Thr Tyr Gln Gly Thr Ser Gln Asp Val
 20 25 30
 Trp Asn Val Leu Phe Asp Asn Arg Lys Tyr Lys Gly Leu Leu Asp Glu
 35 40 45
 Val Asn Lys Leu Ile Glu Asp Thr Lys Arg Leu Tyr Lys Gln Gly Tyr
 50 55 60
 Arg Leu Glu Ala Ile Asp Glu Gln Gln Lys Pro Lys Val Thr Glu Leu
 65 70 75 80
 Glu Asn Lys Phe Lys Gln Phe Ala Thr Asp Arg Leu Asn Glu Ile Glu
 85 90 95
 Gln Arg Cys Asn Glu Ile Glu Lys Glu Ser Gln Gln Asp Asn Val Lys
 100 105 110
 Asp Pro Gln Thr Glu Ile Ile Lys Arg Gln Asn Leu Glu Ala Arg Leu
 115 120 125
 Ser Phe Tyr Asn Asp Asn Glu Ile Val Asp Tyr Ile Asn Ser Lys Asp
 130 135 140
 Val Thr Ser Thr Asp Ile Tyr Glu Leu Ser Leu Leu Gln Gln Lys Tyr
 145 150 155 160
 Asp Asn Gln Leu Asn Glu Ser Gln Gln Arg Gln Val Ala Phe Lys Leu

				165					170					175			
Glu	Glu	Leu	Lys	Gln	Gly	Val	Leu	Tyr	Pro	Tyr	Thr	Thr	Asn	Glu	Glu		
			180						185				190				
Tyr	Lys	Asn	Leu	Met	Phe	Glu	Tyr	Ser	Val	Ile	Asn	Gln	Thr	Gly	Met		
		195						200				205					
Ala	Lys	Thr	Gly	Val	Val	Ile	Thr	Lys	Asn	Glu	Gln	Tyr	Gly	Gly	Val		
	210					215					220						
Glu	Ile	Lys	Gln	Leu	Thr	Glu	Arg	Tyr	Lys	Asn	Ala	Ile	Asn	Glu	Val		
225					230					235					240		
Lys	Gln	Ser	Asn	Asn	Arg	Arg											
				245													

<210> 6213

<211> 46

<212> PRT

<213> S.epidermidis

<400> 6213

Ile	Met	Lys	Asp	Ile	Phe	Asn	Glu	Met	Asp	Tyr	Arg	Asn	Ile	Pro	Arg		
1				5					10				15				
Asp	Met	Leu	Asp	Lys	Asn	Ile	Pro	Thr	Gly	Arg	Gly	Met	Val	Lys	Trp		
			20					25					30				
Ala	Pro	Phe	Val	Ile	Cys	Thr	Asn	Leu	Ile	Lys	Asn	Leu	Ile				
		35					40					45					

<210> 6214

<211> 326

<212> PRT

<213> S.epidermidis

<400> 6214

Ala	Phe	Met	Asp	Thr	Ala	Thr	His	Ile	Val	Met	Gly	Val	Gly	Leu	Thr		
1				5					10					15			
Ala	Leu	Ala	Thr	Gln	Asp	Pro	Val	Met	Ala	Glu	Ser	Phe	Ala	Ala	Thr		
			20					25					30				
Ala	Thr	Thr	Leu	Ile	Ala	Gly	Ser	Leu	Ile	Pro	Asp	Gly	Asp	Thr	Val		
		35				40						45					
Leu	Lys	Leu	Lys	Asp	Asn	Ala	Thr	Tyr	Ile	Ser	His	His	Arg	Gly	Ile		
	50				55					60							
Thr	His	Ser	Leu	Pro	Phe	Thr	Ile	Leu	Trp	Pro	Ile	Leu	Ile	Thr	Phe		
65					70				75					80			
Phe	Ile	Phe	Val	Ile	Phe	Ser	Gln	Thr	Asn	Pro	Leu	His	Val	Trp	Leu		
			85					90					95				
Trp	Ala	Gln	Leu	Ala	Val	Phe	Leu	His	Val	Phe	Val	Asp	Ile	Phe	Asn		
		100					105					110					
Ser	Tyr	Gly	Thr	Gln	Ala	Leu	Arg	Pro	Ile	Thr	Asn	Lys	Trp	Ile	Gln		
		115				120						125					
Leu	Ser	Val	Ile	Asn	Thr	Phe	Asp	Pro	Ile	Ile	Phe	Ile	Ile	Leu	Ser		
	130				135					140							
Thr	Gly	Val	Leu	Leu	Trp	Ile	Leu	Gly	Ile	His	Pro	Tyr	Ile	Val	Phe		
145				150					155					160			
Phe	Pro	Ile	Ile	Leu	Ile	Leu	Ile	Gly	Tyr	Tyr	Ile	Val	Arg	Phe	Lys		
			165				170						175				
Met	Gln	Ala	Ala	Ile	Arg	Lys	Gln	Ala	Leu	Gln	Lys	Ile	Glu	Gln	Ser		
		180					185					190					
His	Thr	Pro	Val	Lys	Val	Phe	Val	Ala	Pro	Thr	Ile	Lys	Phe	His	Val		

	195		200		205										
Trp	Arg	Val	Ala	Ile	Gln	Thr	Asp	Lys	His	Asp	Tyr	Val	Gly	Val	Ser
	210					215					220				
Lys	Trp	Lys	Asn	Val	Asp	Phe	Thr	Asp	Lys	Val	Lys	Arg	Gln	Ser	Met
225					230					235					240
Thr	Pro	Asp	Ser	Ile	Leu	Trp	Lys	Val	Lys	Gly	Asn	Lys	Asp	Ile	Tyr
				245						250					255
Thr	Phe	Leu	Asn	Phe	Ser	Ser	Ile	Tyr	Arg	Trp	Gln	Thr	Thr	Pro	Leu
			260					265					270		
Asp	Asp	Gly	Thr	Thr	Glu	Ile	Arg	Leu	Met	Asp	Leu	Arg	Tyr	Leu	Asn
		275					280					285			
Lys	Gly	Arg	Tyr	Ser	Phe	Val	Ala	Ile	Ala	His	Leu	Thr	Leu	Glu	Asn
	290					295					300				
Glu	Ile	Asp	His	Ser	Tyr	Ile	Gly	Trp	Val	Phe	Ser	Glu	Asp	Lys	Leu
305					310					315					320
Gln	Arg	Lys	Leu	Phe	Ser										
				325											

<210> 6215
 <211> 150
 <212> PRT
 <213> S.epidermidis

<400> 6215															
Val	Ser	Ala	Glu	Leu	Glu	Ser	Ile	Asp	His	Glu	Leu	Glu	Glu	Ser	Ile
1				5					10					15	
Ala	Ser	Leu	Arg	Lys	Ala	Gly	Val	Arg	Ile	Thr	Pro	Gln	Arg	Gln	Ala
			20					25					30		
Ile	Met	Arg	Tyr	Leu	Ile	Ser	Ser	His	Ser	His	Pro	Thr	Ala	Asp	Glu
	35					40						45			
Ile	Tyr	Gln	Ala	Leu	Ser	Pro	Lys	Phe	Pro	Asn	Ile	Ser	Val	Ala	Thr
	50					55				60					
Ile	Tyr	Asn	Asn	Leu	Arg	Val	Phe	Lys	Asp	Ile	Gly	Ile	Val	Lys	Glu
65				70					75					80	
Leu	Thr	Tyr	Gly	Asp	Ser	Ser	Ser	Arg	Phe	Asp	Phe	Asn	Thr	His	Asn
			85					90						95	
His	Tyr	His	Ile	Ile	Cys	Glu	Lys	Cys	Gly	Lys	Ile	Val	Asp	Phe	His
			100					105					110		
Tyr	Pro	Gln	Leu	Asp	Glu	Val	Glu	Gln	Leu	Ala	Gln	His	Val	Thr	Asp
	115					120					125				
Phe	Asp	Val	Thr	His	His	Arg	Met	Glu	Ile	Tyr	Gly	Val	Cys	Lys	Glu
	130					135					140				
Cys	Lys	Glu	Glu	Gly	Asn										
145					150										

<210> 6216
 <211> 258
 <212> PRT
 <213> S.epidermidis

<400> 6216															
Phe	Ile	Lys	Glu	Arg	Asp	Lys	Met	Ile	Val	Lys	Thr	Asp	Glu	Glu	Leu
1				5					10					15	
Gln	Ala	Leu	Lys	Glu	Ile	Gly	Tyr	Ile	Cys	Ala	Lys	Val	Arg	Asp	Thr
			20				25						30		
Met	Lys	Glu	Ala	Thr	Lys	Pro	Gly	Val	Thr	Thr	Arg	Glu	Leu	Asp	His

35 40 45
 Ile Ala Lys Asp Leu Phe Glu Glu His Gly Ala Ile Ser Ala Pro Ile
 50 55 60
 His Asp Glu Asn Phe Pro Gly Gln Thr Cys Ile Ser Val Asn Glu Glu
 65 70 75 80
 Val Ala His Gly Ile Pro Gly Lys Arg Val Ile His Glu Gly Asp Leu
 85 90 95
 Val Asn Ile Asp Val Ser Ala Leu Lys Asn Gly Tyr Tyr Ala Asp Thr
 100 105 110
 Gly Ile Ser Phe Val Val Gly Lys Ser Asp Gln Pro Leu Lys Gln Lys
 115 120 125
 Val Cys Asp Val Ala Thr Met Ala Phe Glu Asn Ala Met Lys Lys Val
 130 135 140
 Lys Pro Gly Thr Lys Leu Ser Asn Ile Gly Lys Ala Val His Ala Thr
 145 150 155 160
 Ala Arg Gln Asn Asp Leu Thr Val Ile Lys Asn Leu Thr Gly His Gly
 165 170 175
 Val Gly Gln Ser Leu His Glu Ala Pro Asn His Val Met Asn Tyr Phe
 180 185 190
 Asp Pro Lys Asp Lys Thr Leu Leu Lys Glu Gly Gln Val Ile Ala Val
 195 200 205
 Glu Pro Phe Ile Ser Thr His Ala Thr Phe Val Thr Glu Gly Lys Asn
 210 215 220
 Glu Trp Ala Phe Glu Thr Lys Asp Lys Ser Tyr Val Ala Gln Ile Glu
 225 230 235 240
 His Thr Val Ile Val Thr Lys Asp Gly Pro Leu Leu Thr Thr Lys Ile
 245 250 255
 Asp Asp

<210> 6217

<211> 398

<212> PRT

<213> S.epidermidis

<400> 6217

Lys Ala Lys Glu Ile Val Met Ser Lys Lys Glu Lys Thr Thr Ser Lys
 1 5 10 15
 Tyr Leu Asn Ser Ile Glu Asp Lys Glu His Lys Lys Asn Lys Lys Ile
 20 25 30
 Glu Val Asp Arg Thr Tyr Ile Glu Pro Gln Glu Phe Gln Ser Lys Lys
 35 40 45
 Pro Lys Lys Lys Asn Gln Val Phe Phe Val Ser Arg Leu Asn Lys Pro
 50 55 60
 Ala Lys Tyr Thr Glu Asn Ser Asn Phe Phe Ser Tyr Leu Ile Tyr Arg
 65 70 75 80
 Ile Gly Lys Asp Asp Ala Ala Gly Leu Ala Ala Gln Met Thr Tyr His
 85 90 95
 Phe Val Leu Ala Leu Phe Pro Met Leu Ile Phe Leu Leu Thr Leu Leu
 100 105 110
 Gly Gln Phe Ile Thr Ile Asp Ala Asn Gln Ile Asn Gln Lys Val Ser
 115 120 125
 Gln Tyr Val Pro Asp Gln Glu Thr Ala Ser Ile Val Gly Gly Ile Val
 130 135 140
 Lys Asp Ile Ser Asp Thr Ala Ser Gly Gly Ile Leu Ser Val Gly Leu
 145 150 155 160

Ile Leu Ala Ile Trp Ser Ala Ser Asn Gly Met Ser Ala Ile Ile Asn
 165 170 175
 Ser Phe Asn Val Ala Tyr Asp Val Glu Asp Ser Arg Asn Gly Val Val
 180 185 190
 Val Lys Leu Leu Ser Ile Leu Tyr Thr Leu Val Leu Ser Ala Val Phe
 195 200 205
 Val Val Ala Val Val Leu Ile Thr Leu Gly Pro Val Ile Asn Lys Phe
 210 215 220
 Leu Phe Gly Pro Leu Gly Ile Asp Asn Gln Ile Glu Trp Ile Phe Asn
 225 230 235 240
 Leu Val Arg Ile Val Ile Pro Leu Ile Ile Phe Ile Ile Phe Thr
 245 250 255
 Val Leu Tyr Ser Val Ala Pro Asn Val Lys Thr Lys Leu Arg Ser Val
 260 265 270
 Ile Pro Gly Ala Ile Phe Thr Ser Ile Ile Trp Leu Leu Gly Ser Phe
 275 280 285
 Ala Phe Gly Tyr Tyr Ile Ser Asn Phe Ser Asn Tyr Ser Lys Thr Tyr
 290 295 300
 Gly Ser Leu Ala Gly Ile Ile Ile Leu Phe Leu Trp Leu Tyr Ile Thr
 305 310 315 320
 Ser Phe Ile Ile Ile Ile Gly Ala Glu Ile Asn Ala Ile Ile His Gln
 325 330 335
 Arg Lys Val Ile Ala Gly His Thr Pro Glu Glu Ala Ala Ile Lys His
 340 345 350
 Asp Asp Asn Asn Glu Asn His Tyr Asn Glu Asn Thr Thr Tyr Glu Tyr
 355 360 365
 Tyr Glu Asp Ser Lys Asp Val Asp Ile Ser Asn Glu Asp Asp Thr Tyr
 370 375 380
 Asn Ile Asn His Gln Ser Lys Glu Glu His His Thr Ser Asp
 385 390 395

<210> 6218

<211> 74

<212> PRT

<213> S.epidermidis

<400> 6218

Ala His Gly Phe Lys Phe Ser Phe Thr Pro Leu Pro Gly Tyr Phe Ser
 1 5 10 15
 Pro Phe Pro His Gly Thr Gly Ser Leu Ser Val Thr Arg Glu Tyr Leu
 20 25 30
 Ala Leu Gly Asp Gly Pro Pro Arg Phe Arg Arg Asn Phe Thr Cys Ser
 35 40 45
 Val Val Leu Arg Ile His Ser Arg Glu Asn Met Phe Pro Thr Thr Gly
 50 55 60
 Leu Leu Pro Ser Leu Ile His Leu Ser Arg
 65 70

<210> 6219

<211> 54

<212> PRT

<213> S.epidermidis

<400> 6219

Lys Thr Phe Cys Asp Ala Lys Ser Tyr Leu Leu Ser Ser Phe Glu Cys
 1 5 10 15

Ile Ile Ile His Leu Ser Gly Asp Asn Gly Lys Glu Val Thr Pro Val
 20 25 30
 Pro Met Pro Asn Thr Glu Val Lys Leu Leu Ser Ala Asp Gly Ser Arg
 35 40 45
 Thr Asp Val Thr Leu Glu
 50

<210> 6220

<211> 56

<212> PRT

<213> S.epidermidis

<400> 6220

Ile Ile Asp Cys Ala Lys Thr Val Ala Val Val Val Pro Ser Pro Ala
 1 5 10 15
 Ile Ser Phe Val Leu Phe Ala Thr Ser Cys Thr Asn Phe Ala Pro Ile
 20 25 30
 Phe Ser Tyr Gly Ser Ser Asn Ser Ile Ser Leu Ala Ile Val Thr Pro
 35 40 45
 Ser Leu Val Ile Lys Gly Val Val
 50 55

<210> 6221

<211> 207

<212> PRT

<213> S.epidermidis

<400> 6221

Gly Gly Arg Leu Met Asn Ala Ile Glu Leu Lys Asp Val Asn Tyr Arg
 1 5 10 15
 Ser Asn Ala Phe Gln Leu Gln Asp Val Ser Phe Asn Val Pro Lys Gly
 20 25 30
 Tyr Val Thr Gly Phe Ile Gly Gly Asn Gly Ala Gly Lys Thr Thr Ile
 35 40 45
 Ile Arg Leu Ile Met Asp Leu Ile Gln Ser Glu Ser Gly Thr Ile Ser
 50 55 60
 Val Phe Glu Lys Asp Ile Lys Ile His Pro Arg Glu Ile Lys Asn Lys
 65 70 75 80
 Ile Gly Phe Val Tyr Ser Glu Ile Tyr Phe Asn Gln Lys Trp Thr Val
 85 90 95
 Lys Lys Leu Glu Asn Ile Ile Ala Pro Phe Tyr Asp Arg Trp Asp His
 100 105 110
 Glu Ile Phe Ile Lys Tyr Leu Lys Phe Phe Gln Leu Pro Tyr Lys Asn
 115 120 125
 Lys Ile Lys Thr Phe Ser Thr Gly Met Lys Met Lys Leu Ser Leu Ala
 130 135 140
 Ile Ala Phe Ser His His Ala Glu Leu Phe Ile Leu Asp Glu Pro Thr
 145 150 155 160
 Ser Gly Leu Asp Pro Leu Ile Arg Asn Glu Leu Leu Glu Ile Ile Gln
 165 170 175
 Gln Glu Leu Ile Asp Glu Asn Lys Thr Val Phe Phe Ser Thr His Ile
 180 185 190
 Ile Ser Asp Leu Glu Lys Ile Ala Asp Tyr Ile Val Phe Ser Gln
 195 200 205

<210> 6222

<211> 359
 <212> PRT
 <213> S.epidermidis

<400> 6222

Cys	Phe	Lys	Trp	Arg	Phe	Asn	Met	Ser	His	Ser	Gln	Ile	Asn	Gly	Lys
1				5					10					15	
Arg	Phe	Phe	Asn	Asn	Ile	Leu	Asn	Ala	Val	Gly	Ala	Gly	Val	Val	Ile
			20					25					30		
Ala	Leu	Leu	Pro	Asn	Ala	Leu	Leu	Gly	Glu	Leu	Leu	Lys	Phe	Phe	Lys
		35					40					45			
Glu	Gly	Asn	His	Val	Leu	Glu	Thr	Ile	Phe	Gln	Leu	Val	Thr	Ile	Ile
	50					55					60				
Gln	Ser	Phe	Met	Ala	Phe	Ile	Ile	Gly	Val	Leu	Ala	Ala	His	Gln	Phe
65					70					75					80
Lys	Phe	Lys	Gly	Thr	Gly	Ala	Ala	Ile	Ile	Gly	Ile	Ser	Ala	Met	Leu
				85						90				95	
Gly	Ser	Gly	Ala	Val	His	Tyr	Asn	Gly	Gln	Thr	Ile	Glu	Leu	Lys	Gly
			100					105					110		
Ile	Gly	Asp	Ile	Ile	Asn	Val	Ile	Leu	Val	Val	Ile	Leu	Ala	Cys	Phe
		115					120					125			
Ile	Tyr	Met	Phe	Leu	Glu	Gly	Lys	Leu	Gly	Ser	Leu	Glu	Met	Ile	Ile
	130					135					140				
Leu	Pro	Val	Leu	Val	Pro	Val	Ile	Ser	Gly	Leu	Ile	Gly	Leu	Leu	Thr
145					150					155					160
Leu	Pro	Tyr	Val	Gln	Val	Ile	Thr	Gln	Ser	Leu	Gly	Lys	Leu	Val	Asn
				165					170					175	
Arg	Phe	Thr	Glu	Leu	Asn	Pro	Leu	Leu	Met	Ser	Ile	Leu	Ile	Cys	Val
			180					185					190		
Thr	Phe	Ser	Leu	Leu	Met	Val	Thr	Pro	Ile	Ser	Leu	Val	Ala	Ile	Ala
		195					200					205			
Thr	Ala	Ile	Asn	Leu	Thr	Gly	Leu	Gly	Ser	Gly	Ala	Ala	Asn	Met	Gly
	210					215					220				
Ile	Val	Ala	Ala	Cys	Val	Thr	Phe	Leu	Phe	Gly	Ser	Leu	Arg	Val	Asn
225					230					235					240
Ser	Leu	Gly	Val	Asn	Val	Val	Leu	Leu	Ile	Gly	Ala	Ala	Lys	Met	Met
				245					250					255	
Ile	Pro	Val	Tyr	Leu	Lys	His	Leu	Ile	Ile	Ala	Ile	Pro	Leu	Thr	Ile
			260					265					270		
Asn	Gly	Val	Ile	Cys	Gly	Ile	Ile	Ala	Tyr	Ile	Leu	Lys	Ile	Lys	Gly
	275						280					285			
Thr	Ala	Leu	Ser	Ala	Gly	Phe	Gly	Tyr	Thr	Gly	Leu	Val	Gly	Pro	Ile
	290					295					300				
Asn	Ala	Leu	Asn	Arg	Met	Ser	Gly	Asn	Pro	Ser	Met	Asn	Ile	Ile	Leu
305					310					315					320
Leu	Ile	Ile	Gly	Tyr	Phe	Val	Ile	Pro	Phe	Ala	Gly	Ala	Phe	Ile	Val
				325					330					335	
His	Lys	Ile	Cys	Lys	Lys	Val	Leu	Ser	Thr	Tyr	Ser	Asp	Glu	Ile	Tyr
			340					345					350		
Lys	Phe	Glu	Ile	Ser	Lys	Asp									
		355													

<210> 6223
 <211> 58
 <212> PRT
 <213> S.epidermidis

<400> 6223

Lys Leu Met Trp Asn Phe Ile Lys Gly Leu Phe Lys Phe Val Phe Ser
 1 5 10 15
 Leu Leu Ala Ile Thr Thr Val Val Val Gly Ile Gly Val Val Ala Phe
 20 25 30
 Ala Tyr Ile Phe Lys Lys Asp Phe Glu Asp Ile Glu Arg Lys Thr Lys
 35 40 45
 Glu Ile Val Ser Asp Ile Glu Asn Asn Asn
 50 55

<210> 6224

<211> 56

<212> PRT

<213> S.epidermidis

<400> 6224

Gly Gly Glu Cys Ser Tyr Leu Ile Asn Asn His Cys Arg Lys Ile Thr
 1 5 10 15
 Asp Thr Gln Leu Arg Asp Asn Gly Asp Arg Asn Gln Lys Ser Lys Thr
 20 25 30
 Asn Val Leu Ser Ile Asn Leu Phe Val Leu Ala Phe Val Leu Lys Ser
 35 40 45
 His Lys Lys Lys Thr Ile Asn Tyr
 50 55

<210> 6225

<211> 56

<212> PRT

<213> S.epidermidis

<400> 6225

Ile Lys Leu Arg Tyr Gln Met Leu Met Ile Leu Ile Tyr Ser Val Ser
 1 5 10 15
 Ile Ile Asp Lys Ile Tyr Thr Ile Arg Tyr Leu Ile Tyr Asn Ile Ser
 20 25 30
 Cys Ile Leu Ile Phe His Asn Leu Ile Ser Pro Asn Asn Thr Lys Asp
 35 40 45
 Phe Leu Leu Leu Ser Thr Leu Lys
 50 55

<210> 6226

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6226

Met Ile Leu Leu Tyr Leu Leu Ala Phe Lys Thr Pro Gln Ser Ser Leu
 1 5 10 15
 Tyr Val Ser Ile Tyr Cys Phe Leu Asn Asn Ile Gly Asn Cys His Lys
 20 25 30
 Phe Val Asp Thr Ile Leu Glu Phe Ile Lys Lys
 35 40

<210> 6227

<211> 40

<212> PRT

<213> S.epidermidis

<400> 6227

Asn	Arg	Ile	Arg	Ile	Lys	Phe	Asn	Gly	Gln	Ser	Ile	Thr	Lys	Gly	Ile
1				5				10						15	
Tyr	Leu	Gln	Phe	Asp	Val	Ile	Asp	Asp	Phe	Asp	Ser	Phe	Phe	Lys	Pro
		20					25						30		
Ser	Ile	Asn	Leu	Asn	Glu	Lys	Asn								
		35					40								

<210> 6228

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6228

Pro	Phe	Gly	Arg	Arg	Phe	Glu	Ser	Cys	Lys	Val	His	Ile	Ile	Leu	Glu
1				5				10						15	
Glu	Tyr	Pro	Ser	Pro	Ala	Glu	Gly	Ile	Gly	Leu	Glu	Asn	Arg	Gln	Glu
		20					25						30		
Leu	Asn	Gly	Ser	Arg	Gly	Phe	Glu	Ser	Leu	Phe	Leu	Arg	Phe	Asn	Gly
		35					40					45			
Pro	Val	Val													
		50													

<210> 6229

<211> 491

<212> PRT

<213> S.epidermidis

<400> 6229

Leu	Ile	Leu	Arg	Leu	Ile	Ser	Asn	Lys	Ile	Ile	Thr	Thr	Ser	Asn	Leu
1				5				10						15	
Arg	Leu	Gly	Met	Pro	His	Ile	Ile	Phe	Leu	Thr	Phe	Leu	Tyr	Val	Gly
		20						25					30		
Gly	Lys	Lys	Leu	Glu	Thr	Ile	Lys	Lys	Asn	Glu	Val	Lys	Thr	Gly	Lys
		35					40					45			
Val	Ile	Asp	Leu	Thr	His	Glu	Gly	His	Gly	Val	Val	Lys	Val	Asp	Arg
	50				55					60					
Tyr	Pro	Ile	Phe	Ile	Pro	Asn	Ala	Leu	Ile	Asp	Glu	Glu	Ile	Lys	Phe
65					70					75				80	
Lys	Leu	Ile	Lys	Val	Lys	Lys	Asn	Phe	Ala	Ile	Gly	Lys	Leu	Ile	Glu
			85					90						95	
Val	Ile	Ser	Glu	Ser	Asp	Asp	Arg	Val	Thr	Pro	Pro	Cys	Ile	Tyr	Tyr
		100						105					110		
Ala	Lys	Cys	Gly	Gly	Cys	Gln	Leu	Gln	His	Met	Thr	Tyr	Arg	Ala	Gln
		115					120					125			
Leu	Asp	Met	Lys	Arg	Glu	Gln	Val	Val	Asn	Leu	Phe	His	Arg	Lys	Gly
	130					135					140				
Pro	Phe	Glu	Asn	Thr	Val	Ile	Lys	Glu	Thr	Ile	Gly	Met	Val	Asn	Pro
145					150					155				160	
Trp	Arg	Tyr	Arg	Asn	Lys	Ser	Gln	Ile	Pro	Val	Gly	Gln	Ser	Asn	Ser
			165					170						175	
Asn	Gln	Val	Ile	Met	Gly	Phe	Tyr	Arg	Gln	Arg	Ser	His	Asp	Ile	Ile
			180					185					190		

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Asp Met Asp Ser Cys Leu Ile Gln Asp Arg Gln His Gln Glu Val Met
    195                200                205
Asn Arg Val Lys Tyr Trp Leu Asn Glu Leu Asn Ile Ser Ile Tyr Asn
    210                215                220
Glu Lys Thr Lys Thr Gly Leu Ile Arg His Leu Val Val Arg Thr Gly
    225                230                235                240
Tyr His Thr Asp Glu Met Met Val Ile Phe Val Thr Asn Gly Ala Thr
    245                250                255
Phe Lys Gln Ser Glu Leu Leu Val Asn Lys Leu Lys Lys Glu Phe Pro
    260                265                270
Asn Ile Thr Ser Ile Lys Gln Asn Ile Asn Asn Ser His Ser Asn Val
    275                280                285
Ile Met Gly Arg Gln Ser Met Thr Leu Tyr Gly Lys Asp Lys Ile Glu
    290                295                300
Asp Gln Leu Ser Glu Val Thr Tyr His Ile Ser Asp Leu Ser Phe Tyr
    305                310                315                320
Gln Ile Asn Ser Ser Gln Thr Glu Lys Leu Tyr Gln Gln Ala Leu Asn
    325                330                335
Tyr Ala Gln Leu Thr Gly Lys Glu Ile Val Leu Asp Thr Tyr Cys Gly
    340                345                350
Ile Gly Thr Ile Gly Leu Tyr Met Ala Pro Leu Ala Lys His Val Tyr
    355                360                365
Gly Val Glu Val Val Pro Gln Ala Ile Lys Asp Ala Glu Asp Asn Ala
    370                375                380
Thr Lys Asn Gln Leu Lys Asn Thr Thr Phe Glu Cys Gly Lys Ala Glu
    385                390                395                400
Asp Val Ile Leu Thr Trp Lys Ser Gln Gly Ile Lys Pro Gly Val Val
    405                410                415
Met Val Asp Pro Pro Arg Lys Gly Cys Asp Glu Thr Phe Leu Thr Thr
    420                425                430
Leu Leu Lys Leu Asn Pro Lys Arg Ile Val Tyr Ile Ser Cys Asn Pro
    435                440                445
Ser Thr Gln Gln Arg Asp Ala Gln Ile Leu Ala Glu Gln Tyr Glu Leu
    450                455                460
Val Glu Ile Thr Pro Val Asp Met Phe Pro Gln Thr Thr His Ile Glu
    465                470                475                480
Thr Val Ala Leu Phe Val Arg Lys Asp Glu Glu
    485                490

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<210> 6230

<211> 729

<212> PRT

<213> S.epidermidis

<400> 6230

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Met Asn Ala Leu Val Lys Asn Met Asn Ser Glu Gln Ser Glu Ala Val
1      5      10
Arg Thr Thr Glu Gly Pro Leu Leu Ile Met Ala Gly Ala Gly Ser Gly
20     25     30
Lys Thr Arg Val Leu Thr His Arg Ile Ala Tyr Leu Leu Asp Glu Lys
35     40     45
Asp Val Ser Pro Tyr Asn Ile Leu Ala Ile Thr Phe Thr Asn Lys Ala
50     55     60
Ala Lys Glu Met Lys Ala Arg Val Glu His Leu Val Gly Glu Glu Ala
65     70     75     80
Gln Val Ile Trp Met Ser Thr Phe His Ser Met Cys Val Arg Ile Leu

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			85					90					95				
Arg	Arg	Asp	Ala 100	Asp	Arg	Ile	Gly	Ile 105	Glu	Arg	Asn	Phe	Thr 110	Ile	Ile		
Asp	Pro	Thr 115	Asp	Gln	Lys	Ser	Val 120	Ile	Lys	Asp	Val	Leu 125	Lys	Ser	Glu		
Asn	Ile	Asp	Ser	Lys	Arg	Phe 135	Glu	Pro	Arg	Met	Phe 140	Ile	Gly	Ala	Ile		
Ser 145	Asn	Leu	Lys	Asn	Glu 150	Leu	Lys	Thr	Pro	Glu 155	Asp	Ala	Gln	Lys	Glu 160		
Ala	Asn	Asp	Phe 165	His	Ser	Gln	Met	Val 170	Ala	Thr	Val	Tyr 175	Lys	Gly	Tyr		
Gln	Arg	Gln	Leu 180	Ser	Arg	Asn	Glu 185	Ala	Leu	Asp	Phe 190	Asp	Asp	Leu	Ile		
Met	Thr	Thr 195	Ile	Asn	Leu	Phe 200	Glu	Arg	Val	Pro	Glu 205	Thr	Leu	Glu	Tyr		
Tyr	Gln	Asn 210	Lys	Phe	Gln 215	Tyr	Ile	His	Val	Asp 220	Glu	Tyr	Gln	Asp	Thr		
Asn 225	Lys	Ala	Gln	Tyr 230	Thr	Leu	Val	Lys	Leu	Leu 235	Ala	Asn	Lys	Phe	Lys 240		
Asn	Leu	Cys	Val 245	Val	Gly	Asp	Ser	Asp 250	Gln	Ser	Ile	Tyr 255	Gly	Trp	Arg		
Gly	Ala	Asp	Ile 260	Gln	Asn	Ile	Leu	Ser 265	Phe	Glu	Glu	Asp 270	Tyr	Pro	Glu		
Ala	Lys	Thr 275	Ile	Phe	Leu	Glu 280	Gln	Asn	Tyr	Arg	Ser 285	Thr	Lys	Asn	Ile		
Leu	Asn	Ala 290	Ala	Asn	Glu 295	Val	Ile	Lys	His	Asn 300	Ser	Glu	Arg	Lys	Pro		
Lys 305	Gly	Leu	Trp	Thr 310	Ala	Asn	Ser	Gly	Gly	Asp 315	Lys	Ile	Gln	Tyr	Tyr 320		
Glu	Ala	Met	Thr 325	Glu	Arg	Asp	Glu	Ala 330	Glu	Tyr	Val	Val 335	Lys	Glu	Ile		
Met	Lys	His 340	Gln	Arg	Ser	Gly 345	Lys	Lys	Tyr	Ser	Glu 350	Met	Ala	Ile	Leu		
Tyr	Arg	Thr 355	Asn	Ala	Gln	Ser 360	Arg	Val	Leu	Glu	Glu 365	Thr	Phe	Met	Lys		
Ser	Asn	Ile 370	Pro	Tyr	Thr 375	Met	Val	Gly	Gly	Gln 380	Lys	Phe	Tyr	Asp	Arg		
Lys 385	Glu	Ile	Lys	Asp 390	Leu	Leu	Ser	Tyr	Leu	Arg 395	Val	Ile	Ala	Asn	Ser 400		
Asn	Asp	Asp	Ile 405	Ser	Leu	Gln	Arg	Ile 410	Ile	Asn	Val	Pro 415	Lys	Arg	Gly		
Ile	Gly	Pro 420	Ser	Ser	Val	Glu	Lys 425	Ile	Gln	Thr	Tyr 430	Ala	Leu	Gln	Asn		
Asn	Ile	Ser 435	Met	Phe	Asp	Ala 440	Leu	Ala	Glu	Val	Asp 445	Phe	Ile	Gly	Leu		
Ser	Lys	Lys 450	Val	Thr	Gln 455	Glu	Cys	Ile	Ser	Phe 460	Tyr	Glu	Met	Ile	Gln		
Asn 465	Leu	Ile	Lys	Glu 470	Gln	Glu	Phe	Leu	Glu	Ile 475	Ser	Glu	Ile	Val	Asp 480		
Glu	Val	Leu	Gln 485	Lys	Ser	Gly	Tyr	Arg 490	Asp	Met	Leu 495	Asp	Arg	Glu	Gln		
Ser	Ile	Glu 500	Ser	Arg	Ser	Arg	Leu 505	Glu	Asn	Leu	Asp 510	Glu	Phe	Met	Ser		
Val	Pro	Lys 515	Asp	Tyr	Glu 520	Glu	Asn 525	Thr	Pro	Leu	Glu 530	Glu	Gln	Ser	Leu		
Ile	Asn	Phe	Leu	Thr	Asp	Leu	Ser	Leu	Val	Ala	Asp	Ile	Asp	Glu	Ala		

530 535 540
 Asp Thr Gln Asn Gly Val Thr Leu Met Thr Met His Ser Ala Lys Gly
 545 550 555 560
 Leu Glu Phe Pro Ile Val Phe Ile Met Gly Met Glu Glu Ser Leu Phe
 565 570 575
 Pro His Ile Arg Ala Ile Lys Ser Glu Asp Asp His Glu Met Glu Glu
 580 585 590
 Glu Arg Arg Ile Cys Tyr Val Ala Ile Thr Arg Ala Glu Glu Leu Leu
 595 600 605
 Tyr Ile Thr Asn Ala Thr Thr Arg Met Leu Phe Gly Arg Ser Gln Ser
 610 615 620
 Asn Met Pro Ser Arg Phe Leu Lys Glu Ile Pro Glu Asp Leu Leu Asp
 625 630 635 640
 Ser His Thr Gly Gln Lys Arg Gln Thr Ile Tyr Pro Lys Ser Gln Pro
 645 650 655
 Lys Arg Gly Phe Ser Lys Arg Thr Thr Ser Thr Lys Lys Gln Val Ser
 660 665 670
 Ser Ser Asp Trp Lys Val Gly Asp Lys Val Met His Lys Ala Trp Gly
 675 680 685
 Glu Gly Met Val Ser Asn Val Asn Glu Lys Asn Gly Ser Val Glu Leu
 690 695 700
 Asp Ile Ile Phe Lys Ser Glu Gly Pro Lys Arg Leu Leu Ala Gln Phe
 705 710 715 720
 Ala Pro Ile Thr Lys Lys Glu Asp Ser
 725

<210> 6231
 <211> 65
 <212> PRT
 <213> S.epidermidis

<400> 6231
 Asn Leu Glu Arg Lys Ile Gly Phe Thr Pro Ile Ser His Ser Gly Lys
 1 5 10 15
 Glu Cys Val Leu Arg Val Glu Leu Leu Pro His Asn Asn Leu Glu Ala
 20 25 30
 Ala Thr Gly Phe Glu Pro Val Ile Lys Val Leu Gln Thr Ser Ala Leu
 35 40 45
 Pro Leu Gly Tyr Ala Ala Asn Asn Trp Ala Ser Trp Ile Arg Thr Ser
 50 55 60
 Ala
 65

<210> 6232
 <211> 311
 <212> PRT
 <213> S.epidermidis

<400> 6232
 Ser His Ile Leu Ser Val Tyr Ile Tyr Asn Leu Ile Val Thr Thr Val
 1 5 10 15
 Ile Lys Lys Ile Asn Phe Ile Ile Phe Gly Gly Tyr His Met Lys Lys
 20 25 30
 Arg Phe Leu Ser Ile Cys Thr Met Thr Ile Ala Ala Leu Ala Thr Thr
 35 40 45
 Thr Met Val Asn Thr Ser Tyr Ala Lys Thr Asp Thr Glu Ser His Asn

50		55		60
His Ser Ser Leu Gly Thr	Glu Asn Lys Asn Val	Leu Asp Ile Asn Ser		
65	70	75	80	
Ser Ser His Asn Ile Lys	Pro Ser Gln Asn Lys	Ser Tyr Pro Ser Val		
	85	90	95	
Ile Leu Pro Asn Asn Asn	Arg His Gln Ile Phe	Asn Thr Thr Gln Gly		
	100	105	110	
His Tyr Asp Ala Val Ser	Phe Ile Tyr Ile Pro	Ile Asp Gly Gly Tyr		
	115	120	125	
Met Ser Gly Ser Gly Val	Val Val Gly Glu Asn	Glu Ile Leu Thr Asn		
	130	135	140	
Lys His Val Val Asn Gly	Ala Lys Gly Asn Pro	Arg Asn Ile Ser Val		
145	150	155	160	
His Pro Ser Ala Lys Asn	Glu Asn Asp Tyr Pro	Asn Gly Lys Phe Val		
	165	170	175	
Gly Gln Glu Ile Ile Pro	Tyr Pro Gly Asn Ser	Asp Leu Ala Ile Leu		
	180	185	190	
Arg Val Ser Pro Asn Glu	His Asn Gln His Ile	Gly Gln Val Val Lys		
	195	200	205	
Pro Ala Thr Ile Ser Ser	Asn Thr Asp Thr Arg	Ile Asn Glu Asn Ile		
	210	215	220	
Thr Val Thr Gly Tyr Pro	Gly Asp Lys Pro Leu	Ala Thr Met Trp Glu		
225	230	235	240	
Ser Val Gly Lys Val Val	Tyr Ile Gly Gly Glu	Glu Leu Arg Tyr Asp		
	245	250	255	
Leu Ser Thr Val Gly Gly	Asn Ser Gly Ser Pro	Val Phe Asn Gly Lys		
	260	265	270	
Asn Gln Val Ile Gly Ile	His Tyr Gly Gly Val	Asp Asn Lys Tyr Asn		
	275	280	285	
Ser Ser Val Tyr Ile Asn	Asp Phe Val Gln Gln	Phe Leu Arg Asn Asn		
	290	295	300	
Ile Pro Asp Ile Asn Ile	Gln			
305	310			

<210> 6233

<211> 268

<212> PRT

<213> S.epidermidis

<400> 6233

Asn Asp Arg Arg Val Asn	Ile Leu Lys Ile Gln	Ile Leu Gln Phe Asn
1	5	10
Val Glu Arg Gly Asn Val	Asp Lys Asn Met Gln	Asn Ile Lys Thr Lys
	20	25
Phe Asn Gln Tyr Leu Asp	Lys Asp Thr Ser Val	Val Val Leu Pro Glu
	35	40
Met Trp Asn Asn Gly Tyr	Ala Leu Glu Glu Leu	Glu Gln Lys Ala Asp
	50	55
Lys Asn Leu Lys Asp Ser	Ser Leu Phe Ile Lys	Asp Leu Ala His Thr
65	70	75
Phe Asn Val Asp Ile Ile	Ala Gly Ser Val Ser	Asn Ile Arg Glu Asn
	85	90
His Ile Tyr Asn Thr Ala	Phe Ala Ile Asn Lys	Asn Lys Glu Leu Ile
	100	105
Asn Glu Tyr Asp Lys Val	His Leu Val Pro Met	Leu Arg Glu Pro Asp
	115	120

Phe Leu Cys Gly Gly Asn Val Val Pro Glu Pro Phe Tyr Leu Ser Asp
 130 135 140
 Gln Thr Leu Val Thr Gln Ile Ile Cys Tyr Asp Leu Arg Phe Pro Glu
 145 150 155 160
 Ile Leu Arg Tyr Pro Ala Arg Lys Gly Ala Lys Ile Ala Phe Tyr Val
 165 170 175
 Ala Gln Trp Pro Ser Ser Arg Leu Asp His Trp Leu Ser Leu Leu Lys
 180 185 190
 Ala Arg Ala Ile Glu Asn Asp Ile Phe Ile Val Ala Cys Asn Ser Cys
 195 200 205
 Gly Asp Asp Gly His Thr Asn Tyr Ala Gly Asn Ser Ile Val Ile Asn
 210 215 220
 Pro Asn Gly Glu Ile Leu Gly His Leu Asp Asp Lys Glu Gly Val Leu
 225 230 235 240
 Thr Thr His Ile Asp Val Asp Leu Val Asp Gln Gln Arg Glu Tyr Ile
 245 250 255
 Pro Val Phe Arg Asn Leu Lys Pro His Leu Tyr Lys
 260 265

<210> 6234

<211> 582

<212> PRT

<213> S.epidermidis

<400> 6234

Glu Gly Arg Arg Met Ile Lys Arg Tyr Leu Lys Phe Val Lys Pro Tyr
 1 5 10 15
 Arg Tyr Arg Ile Ile Ala Thr Ile Ile Val Gly Ile Ile Lys Phe Gly
 20 25 30
 Ile Pro Met Leu Ile Pro Leu Leu Ile Lys Tyr Ala Ile Asp Gly Val
 35 40 45
 Ile Asn Asn His Ser Leu Thr Asn Gln Glu Lys Phe Ser His Leu Gly
 50 55 60
 Val Ala Ile Gly Ile Ala Leu Phe Ile Phe Leu Ile Val Arg Pro Pro
 65 70 75 80
 Ile Glu Phe Ile Arg Gln Tyr Leu Ala Gln Trp Thr Ser Asn Lys Ile
 85 90 95
 Leu Tyr Asp Ile Arg Lys Gln Leu Tyr Asn His Leu Gln Ala Leu Ser
 100 105 110
 Val Arg Phe Tyr Ala Asn Asn Gln Val Gly Gln Val Ile Ser Arg Val
 115 120 125
 Ile Asn Asp Val Glu Gln Thr Lys Asp Phe Ile Leu Thr Gly Leu Met
 130 135 140
 Asn Ile Trp Leu Asp Cys Ile Thr Ile Ile Ile Ala Leu Ser Ile Met
 145 150 155 160
 Phe Phe Leu Asp Val Lys Leu Thr Phe Ala Ala Ile Phe Ile Phe Pro
 165 170 175
 Phe Tyr Ile Leu Thr Val Tyr Phe Phe Gly Arg Leu Arg Lys Leu
 180 185 190
 Thr Arg Val Arg Ser Gln Ala Leu Ala Glu Val Gln Gly Phe Leu His
 195 200 205
 Glu Arg Val Gln Gly Met Ser Val Ile Lys Ser Phe Ala Ile Glu Asp
 210 215 220
 Asn Glu Ala Lys Asn Phe Asp Asn His Asn Lys Asn Phe Leu Gln Arg
 225 230 235 240
 Ala Phe Gln His Thr Arg Trp Asn Ala Tyr Ser Phe Ala Ala Ile Asn

<210> 6236
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 6236
 Ser Arg Glu Leu Gly Arg Asp Ser Arg Leu Asp Asn Leu Leu Leu Arg
 1 5 10 15
 Glu Cys Phe Tyr Ser Tyr Phe Phe Asn Leu Phe Phe Gly Asp Val Ile
 20 25 30
 Asn Tyr Glu Lys Ile Leu Val Asn Leu Ser Ile
 35 40

<210> 6237
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 6237
 Trp Ser Arg Ser Val Ala Val Asn Thr Pro Ala Cys His Ala Gly Asp
 1 5 10 15
 Arg Gly Phe Asp Ser Arg Arg Asp Arg His Leu Leu Asn Phe Asn Ser
 20 25 30
 Tyr Leu Pro Ile Ile Cys Gly Gly Ile Pro Lys Ser Gly
 35 40 45

<210> 6238
 <211> 59
 <212> PRT
 <213> S.epidermidis

<400> 6238
 Ser Ala Arg Arg Arg Phe Phe Lys Ser Asp Val Lys Ala His Gly Ser
 1 5 10 15
 Thr Val Glu Gly His Trp Lys Leu Glu Asn Leu Ser Ala Glu Glu Glu
 20 25 30
 Ser Gly Ile Pro Cys Val Ala Val Lys Cys Ala Glu Ile Trp Arg Asn
 35 40 45
 Thr Ser Gly Glu Gly Asp Phe Leu Val Cys Asn
 50 55

<210> 6239
 <211> 68
 <212> PRT
 <213> S.epidermidis

<400> 6239
 Leu Cys Trp Leu Ser Asn Pro His His Leu Ser Trp Trp Glu Thr Val
 1 5 10 15
 Ser Gly Gly Gln Phe Asp Trp Gly Gly Arg Leu Leu Lys Gly Asn Gly
 20 25 30
 Gly Ala Gln Arg Phe Pro Gln Asn Gly Trp Lys Ser Phe Ile Glu Cys
 35 40 45
 Lys Gly Ile Arg Glu Leu Asp Cys Glu Thr Tyr Lys Ser Ser Arg Val
 50 55 60

Glu Arg Arg Thr
65

<210> 6240
<211> 137
<212> PRT
<213> S.epidermidis

<400> 6240
Ser Leu Ile Ser Asp Glu Val Ile Ser Leu Asn Ile Leu Asp Leu Tyr
1 5 10 15
Leu Gln Gln Phe Ile Lys Arg Ile Thr Lys Lys Ser Ile Asn Asp Tyr
20 25 30
Lys Met Ser Leu Asp Lys Gln Ile Lys Asn Ile Asp Thr Tyr Ile Asn
35 40 45
Tyr Leu Arg Glu Lys Arg Leu Gln Leu Lys Lys Leu Ile Asp Thr Leu
50 55 60
Thr Leu Ser Leu Glu Asn Lys Tyr Ile Asp Leu Val Asn Asn Gln Ala
65 70 75 80
Ile Tyr Cys Ala Glu Glu Ile His Asp Asn Asp Ile Asp Met Ile Lys
85 90 95
Ser Gln Leu Asn Asp Ala Glu Ser Tyr Tyr Ala Arg Ile Glu Ala Asp
100 105 110
Ile Asn Leu Gln Ser Arg Met Lys Ile Thr Thr Glu Glu Ala Phe His
115 120 125
Phe Ile Tyr His Met Ser Ala Val Ala
130 135

<210> 6241
<211> 43
<212> PRT
<213> S.epidermidis

<400> 6241
Leu Val Ile Ser Arg Leu Gly Val Gln Val Leu Trp Pro Ala Pro Ser
1 5 10 15
Phe Glu Pro Leu Ala Gln Leu Val Glu His Leu Thr Phe Asn Gln Arg
20 25 30
Val Arg Gly Ser Asn Pro Leu Trp Leu Thr Ile
35 40

<210> 6242
<211> 196
<212> PRT
<213> S.epidermidis

<400> 6242
Met Gly Arg Leu Ile Leu Val Ile Arg Ser Asp Asp Met Asp Lys Leu
1 5 10 15
Thr Pro Lys Gln Glu Arg Phe Ala Asn Glu Tyr Ile Lys Thr Leu Asn
20 25 30
Val Thr Gln Ser Ala Ile Lys Ala Gly Tyr Ser Pro Asn Ser Ala His
35 40 45
Val Thr Gly Ser Arg Leu Leu Arg Lys Glu Lys Val Asp Lys Tyr Ile
50 55 60
Lys Ser Lys Lys Asp Glu Ile Met Asp Asp Thr Ile Leu Ser Ala Lys

Glu Ala Leu Gly Ile Ile Gly Glu Pro Gly Ser Ser Lys Thr Leu Ile
 50 55 60
 Gly Arg Ile Leu Ser Gly Ser Val Lys Pro Asp Lys Gly Lys Val Val
 65 70 75 80
 Arg Thr Lys Asn Leu Tyr Phe Gly Asp Ile Asp Asp Arg Lys Ile Asn
 85 90 95
 Asn Leu Thr Val Ser Gln Tyr Val Ser Glu Leu Val Gln Leu Phe Pro
 100 105 110
 Tyr Glu Val Thr Glu His Lys Val Glu Gln Ile Ile Gln Trp Ala His
 115 120 125
 Leu Gly Asp Tyr Ile Glu Glu Lys Val Ser Asn Leu Ser Glu Lys Ser
 130 135 140
 Tyr Ala Gln Leu Leu Leu Ser Ile Ala Arg Ser Ser Lys Asn Asp Ile
 145 150 155 160
 Ile Ile Leu Asn His Val Leu Ser His Leu Asp Glu Thr Phe Ile Glu
 165 170 175
 Arg Ala Thr Val Leu Ser Lys Asp Tyr Ile Glu Ala Asn Lys Thr Leu
 180 185 190
 Val Leu Ile Asp Asn Asp Val Glu Lys Ile Ser Lys Thr Ser Asn Tyr
 195 200 205
 Ile Thr Trp Val Ser His Gly Gln Ile Arg Lys Glu Gly Ser Leu Asn
 210 215 220
 Gln Val Leu Pro Thr Phe Arg Glu His Glu Lys Asp Arg Thr Ser Leu
 225 230 235 240
 Lys Ser Glu Met Glu Ile Glu Asn Phe Asp Tyr Asp Trp Lys Gln Asn
 245 250 255
 Arg Ser Arg Ile Pro Glu Met Thr Tyr Asn Phe Lys Arg Ile Glu Arg
 260 265 270
 Tyr Asn His Ala Lys Pro Pro Arg Phe Leu Val Arg Phe Trp Thr Leu
 275 280 285
 Phe Val Ser Phe Leu Ile Gly Leu Val Leu Met Ser Val Leu Phe Phe
 290 295 300
 Asn Asn Leu Gly Met Val Lys Leu Gly Asn Ile Asn Thr Gln Ala Ser
 305 310 315 320
 Ile Gln Asn Gln Asn Lys Asp Thr Tyr Glu Glu Lys Leu Ala Tyr Gly
 325 330 335
 Leu Ala Leu Asp Gly Ser Val Thr Leu Asn Gly Ser Lys Asp Leu Lys
 340 345 350
 Val Pro Lys Tyr Ser Leu Ile Thr Ile Thr Gly Glu Asn Asn Lys Arg
 355 360 365
 Tyr Arg Val Glu Met Asn Gln Arg Arg Tyr Ser Val Ser Lys Asn Gln
 370 375 380
 Val Phe Tyr Phe Asn Pro Ala Gly Leu Tyr Glu Ser His Thr Phe Lys
 385 390 395 400
 Lys Leu Ser Pro Tyr Ile Lys Ser Asn Tyr Ser Thr Tyr Val Glu Tyr
 405 410 415
 Phe Asn Ser His Leu His Gln Lys His Asp Lys Val Thr Glu Thr Leu
 420 425 430
 Arg Pro Asp Lys Asp Lys Lys Tyr Val Val Pro Ile Thr Gln Gln Pro
 435 440 445
 Ile Lys Met Ile Phe Gly Asp Asn Asp Lys Leu Ser Gly Phe Val Ile
 450 455 460
 Pro Met Thr Asn Lys Thr Glu Leu Lys Lys Thr Phe Asn Ile Thr Lys
 465 470 475 480
 Asp Val Trp Ile Thr Lys Ser Gly Ser Gly Tyr Phe Ile Ala Asp Met
 485 490 495

Lys Glu Glu Lys Trp Ile Tyr Ile Glu Leu
 500 505

<210> 6246
 <211> 193
 <212> PRT
 <213> S.epidermidis

<400> 6246
 Phe Arg Leu Arg Ala Cys Val Asn Met Asp Lys Ile Thr Phe Leu Asn
 1 5 10 15
 Glu Leu Glu Leu Ala Leu Asp Asp Leu Pro Arg Glu Glu Lys Asp Ser
 20 25 30
 Ile Met His Lys Tyr Glu Asn Leu Phe Tyr Glu Glu Glu Leu Lys Gly
 35 40 45
 Ile Ser Glu Ser Gln Ile Ile Lys Lys Leu Asn Asp Pro Tyr His Ile
 50 55 60
 Ser Lys Glu Val Lys Ala Arg Ser Ala Ile His Tyr Ala Ser Tyr Lys
 65 70 75 80
 Pro Thr Leu Ala Asn Ile Val Arg Ala Ile Leu Ala Ser Leu Ser Leu
 85 90 95
 Gly Ile Leu Ser Leu Phe Ile Ile Leu Ile Pro Val Val Ile Ile Ala
 100 105 110
 Leu Leu Ile Leu Phe Cys Phe Leu Ile Ser Ile Cys Phe Ile Phe Ala
 115 120 125
 Pro Phe Val Leu Leu Phe Tyr Ser Val Leu His Gly Phe Glu Asn Ala
 130 135 140
 Ile Ser Asn Val Phe Phe Ser Ile Ser Phe Thr Gly Leu Gly Ile Met
 145 150 155 160
 Phe Ile Val Ile Thr Leu Lys Ile Gly Glu Ile Ile His Lys Leu Ile
 165 170 175
 Leu Lys Tyr Leu Leu Trp Tyr Ile Lys Thr Val Lys Gly Ser Val Lys
 180 185 190
 Glu

<210> 6247
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6247
 Asn Ala Gln Arg Tyr Gly Gly Thr Pro Val Ala Lys Ala Thr Phe Trp
 1 5 10 15
 Ser Val Thr Asp Ala Asp Val Arg Lys Arg Gly Asp Gln Thr Gly Leu
 20 25 30
 Asp Thr Leu Val Val His Ala Val Asn Asp Glu Cys
 35 40

<210> 6248
 <211> 244
 <212> PRT
 <213> S.epidermidis

<400> 6248
 Ile Met Lys Ser Leu Gln Leu Val Lys Tyr Asp Leu Ile Ser Ile Leu


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1           5           10           15
Lys Ser Pro Tyr Thr Tyr Leu Ala Phe Ile Leu Val Ile Gly Met Thr
                20                25                30
Val Phe Gln Ala Ser Met Met Ala Asn Tyr Ser Ser Ala His Lys Val
                35                40                45
Asn Ile Asp Met Val Phe Asn Leu Ala Asn Trp Leu Phe Leu Phe Ala
                50                55                60
Gly Leu Leu Phe Ile Ile Lys Thr Ile Thr Arg Asp Tyr Ser Gln Gly
65                70                75                80
Thr Ile Gln Leu Phe Met Ser Arg Ile Thr Ser Arg Met Gly Tyr Ile
                85                90                95
Ile Thr Lys Thr Val Ser Ile Val Leu Ile Ser Phe Leu Phe Thr Ile
                100                105                110
Ile His Tyr Leu Val Ile Ile Ile Ile Gln Ser Thr Thr Lys Ser Glu
                115                120                125
Lys Met Asp Gly Asp Arg Phe Leu Asn Asn Ile Trp Phe Tyr Leu Ile
                130                135                140
Phe Phe Leu Phe Phe Gly Leu Phe Leu Leu Leu Ile Thr Leu Ile Val
145                150                155                160
Glu Lys Pro Ala Val Ile Phe Thr Leu Gly Ile Phe Leu Ile Leu Ile
                165                170                175
Val Pro Phe Ile Gln Pro Phe Ile Pro Met Ile Pro Asn Ile Gly Asp
                180                185                190
Asp Ile Gln Asp Ser Phe Lys Tyr Ile Pro Phe Thr Tyr Leu Thr Glu
                195                200                205
Lys Met Thr Gly Glu Ile Lys Phe Ser Asn Trp Gln Trp Phe Ile Ser
                210                215                220
Ile Ala Ser Ile Val Val Leu Phe Ile Ala Asn Met Leu Tyr Ala Ser
225                230                235                240
Lys Arg Asp Ile

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<210> 6249

<211> 215

<212> PRT

<213> S.epidermidis

<400> 6249

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Ile Arg Arg Arg Ile Gln Val Ala Ile Lys Val Leu Phe Val Asp Asp
1           5           10           15
His Glu Met Val Arg Ile Gly Ile Ser Ser Tyr Leu Ser Thr Gln Glu
                20                25                30
Asp Ile Glu Val Val Gly Glu Gly Ala Ser Gly Lys Asp Ala Ile Thr
                35                40                45
Lys Ala His Glu Leu Lys Pro Asp Leu Ile Leu Met Asp Leu Leu Met
50                55                60
Asp Asp Met Asp Gly Val Glu Ala Thr Thr Glu Ile Lys Lys Asp Leu
65                70                75                80
Pro Gln Ile Lys Val Val Met Leu Thr Ser Phe Ile Glu Asp Lys Glu
                85                90                95
Val Tyr Arg Ala Leu Asp Ser Gly Val Asp Ser Tyr Ile Leu Lys Thr
                100                105                110
Thr Ser Ala Ser Asp Ile Ala Asp Ala Val Arg Lys Thr Tyr Glu Gly
                115                120                125
Glu Ser Val Phe Glu Pro Glu Val Leu Val Lys Met Arg Asn Arg Met
130                135                140

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Lys Lys Arg Ala Glu Leu Tyr Glu Met Leu Thr Glu Arg Glu Met Glu
 145 150 155 160
 Ile Leu Leu Leu Ile Ala Lys Gly Tyr Ser Asn Gln Glu Ile Ala Ser
 165 170 175
 Ala Ser His Ile Thr Ile Lys Thr Val Lys Thr His Val Ser Asn Ile
 180 185 190
 Leu Ser Lys Leu Glu Val Gln Asp Arg Thr Gln Ala Val Ile Tyr Ala
 195 200 205
 Phe Gln His Asn Leu Ile Gln
 210 215

<210> 6250

<211> 46

<212> PRT

<213> S.epidermidis

<400> 6250

Val Leu Ser Gly Leu Asp Ser Ile His Asp Lys Phe Met Leu Asn Lys
 1 5 10 15
 Val Lys Val Phe Lys Thr Leu Ala Lys Ser Pro Gly Leu Ser Tyr Leu
 20 25 30
 Gly Val Ile Arg Lys Ile Val Val Phe Gly Cys Ser Ile Lys
 35 40 45

<210> 6251

<211> 68

<212> PRT

<213> S.epidermidis

<400> 6251

Tyr Leu Gly Gly Lys Met Ile Lys Leu Thr Asn Pro Ala Val Thr Ser
 1 5 10 15
 Pro Ile Arg Ala Val Ser Asn Arg Glu Lys Lys Leu Asn Thr Tyr Ala
 20 25 30
 Ser Cys Ile Pro Gly Ile Ile Ala Thr Glu Val Asn Thr Ala Thr Val
 35 40 45
 Val Pro Thr Cys Lys Leu Ser Leu Val His Ile Arg Met Val Asn Val
 50 55 60
 Ala Leu Lys Ala
 65

<210> 6252

<211> 167

<212> PRT

<213> S.epidermidis

<400> 6252

Tyr Asn Ile Leu Asn Tyr Ser Arg Glu Gly Phe Tyr Ile Arg Asn Leu
 1 5 10 15
 Glu Thr Tyr Phe Asn Lys Ser Gln Thr Leu Asn Glu Phe Ile Asn Lys
 20 25 30
 Ile Gln Glu Ser Lys Asp Asn Leu Leu Ser Ile Tyr Asn Phe Phe His
 35 40 45
 Leu Pro Leu Asn Asp Ala Arg Leu Asn Gln Leu Arg Glu Ser Asn Tyr
 50 55 60
 Tyr Lys Val Leu Ile Ile Lys Glu Asp Trp Cys Gly Asp Ala Met Met

Ser Gln Gln Glu Glu Met Gly Tyr Thr Gln Lys Ser Pro Arg Trp Ala
 290 295 300
 Ile Ala Tyr Lys Phe Pro Ala Glu Glu Val Ile Thr Lys Leu Leu Asp
 305 310 315 320
 Ile Glu Leu Ser Ile Gly Arg Thr Gly Val Val Thr Pro Thr Ala Ile
 325 330 335
 Leu Glu Pro Val Lys Val Ala Gly Thr Thr Val Ser Arg Ala Ser Leu
 340 345 350
 His Asn Glu Asp Leu Ile His Glu Arg Asp Ile Arg Ile Gly Asp Ser
 355 360 365
 Val Val Ile Lys Lys Ala Gly Asp Ile Ile Pro Glu Val Val Lys Ser
 370 375 380
 Ile Leu Asp Arg Arg Pro Asn Glu Ser Glu Ile Tyr His Met Pro Thr
 385 390 395 400
 His Cys Pro Ser Cys Gly His Glu Leu Val Arg Ile Glu Gly Glu Val
 405 410 415
 Ala Leu Arg Cys Ile Asn Pro Lys Cys Gln Ala Gln Leu Ile Glu Gly
 420 425 430
 Leu Ile His Phe Val Ser Arg Gln Ala Met Asn Ile Asp Gly Leu Gly
 435 440 445
 Thr Lys Ile Ile His Gln Leu Tyr Glu Asn Gln Leu Ile Lys Asp Val
 450 455 460
 Ala Asp Ile Phe Tyr Leu Lys Glu Glu Asp Leu Leu Pro Leu Glu Arg
 465 470 475 480
 Met Gly Lys Lys Lys Val Asp Asn Leu Leu Leu Ala Ile Glu Lys Ser
 485 490 495
 Lys Glu Gln Ser Leu Glu His Leu Leu Phe Gly Leu Gly Ile Arg His
 500 505 510
 Leu Gly Val Lys Ala Ser Gln Val Leu Ala Glu Arg Tyr Glu Thr Met
 515 520 525
 Asp Gln Leu Phe Lys Val Thr Glu Ser Glu Leu Ile Glu Ile Gln Asp
 530 535 540
 Ile Gly Asp Lys Leu Ala Gln Ser Val Val Thr Tyr Leu Glu Asn Ser
 545 550 555 560
 Asp Ile Arg Ser Leu Ile Glu Lys Leu Ser Asn Lys Asn Val Asn Met
 565 570 575
 Ser Tyr Lys Gly Ile Lys Thr Thr Glu Ile Glu Gly His Pro Asp Phe
 580 585 590
 Ser Gly Lys Thr Ile Val Leu Thr Gly Lys Leu Glu Gln Met Thr Arg
 595 600 605
 Asn Glu Ala Ser Glu Trp Leu Lys Met Gln Gly Ala Lys Val Thr Asn
 610 615 620
 Ser Val Thr Lys Ser Thr Asp Ile Val Ile Ala Gly Ala Asp Ala Gly
 625 630 635 640
 Ser Lys Leu Ala Lys Ala Glu Lys Tyr Gly Thr Glu Ile Trp Thr Glu
 645 650 655
 Ala Ala Phe Ile Glu Lys Gln Asn Gly Ile
 660 665

<210> 6254

<211> 273

<212> PRT

<213> S.epidermidis

<400> 6254

Phe Lys Arg Gly Gly Ile Met His Leu Tyr Tyr Leu Gly Pro Lys Gly

Ile Met Ile Ala Pro Leu Val Ile Ile Ser Ala Thr Leu Leu Ala Leu
 115 120 125
 Ile Gln Ile Tyr Ser Phe Ser Ser Leu Ile Phe Met Phe Ser Ile His
 130 135 140
 Thr Ser Tyr Cys Met Ile Asp Val Phe Leu Val Ala Leu Ala Leu Gln
 145 150 155 160
 Ser Lys Phe Lys Tyr Ile Gln Thr Tyr Gly Glu Gly Leu Tyr Leu Tyr
 165 170 175
 His Gln Lys Pro Thr Gln Thr Tyr Tyr Glu
 180 185

<210> 6256

<211> 348

<212> PRT

<213> S.epidermidis

<400> 6256

Phe Tyr Gly Gly Phe Gly Met Thr Leu Gly Tyr Ile Gly Ser Tyr Thr
 1 5 10 15
 Lys Lys Ser Gly Lys Gly Ile Tyr Arg Phe Lys Leu Asn Asp Glu Thr
 20 25 30
 Gly Val Ile Glu Ala Leu Glu Thr Gly Tyr Glu Ile Glu Ala Ser Thr
 35 40 45
 Tyr Leu Thr Arg Asn Glu Ser Phe Leu Tyr Ala Ile Thr Lys Glu Gly
 50 55 60
 Glu Glu Cys Gly Val Ala Ser Phe Ser Ile Lys Glu Asp Gly Gln Leu
 65 70 75 80
 Glu Leu Ile Asn Lys Cys Leu Ala Ser Lys Gln Gly Thr Gly Cys Tyr
 85 90 95
 Ile Gln Val Ser Ser Asn Gly Lys Tyr Leu Phe Glu Ala Val Tyr Gly
 100 105 110
 Ala Gly Leu Ala Arg Ile Tyr Lys Leu Asn Pro Ile Thr Gly Ala Ile
 115 120 125
 Glu Lys Leu Ile Glu Glu Leu Glu His Glu Phe Pro Thr Gly Ser His
 130 135 140
 Glu Arg Gln Asp Ser Ser His Val His Phe Leu Asn Glu Thr Pro Asp
 145 150 155 160
 His Lys Tyr Val Val Ala Thr Asp Leu Gly Thr Asp Arg Val Val Thr
 165 170 175
 Tyr Lys Phe Gly Glu Asp Gly Leu Lys Gln Tyr Ala Val Ser Gln Phe
 180 185 190
 Lys Asn Ser Asp Gly Pro Arg His Ile Ala Phe Ser Asn Asp Gly Arg
 195 200 205
 His Ala Tyr Ile Val His Glu Leu Ser Asn Glu Val Ser Val Thr Glu
 210 215 220
 Tyr Gln Asp Gly Lys Phe Ile Glu Leu Glu Arg His Ser Thr Ile Pro
 225 230 235 240
 Ser Asp Phe Asn Gly Glu Ser Lys Leu Ala Ala Val Arg Leu Ser His
 245 250 255
 Asp Gly Lys His Leu Tyr Ile Ser Asn Arg Gly His Asp Ser Ile Ala
 260 265 270
 Ile Phe Glu Val Leu Glu Asp Gly Arg Ser Leu Arg Ser Ile Glu Ile
 275 280 285
 Gln Pro Ser Tyr Asp Ala Phe Pro Arg Asp Phe Asn Ile Thr Glu Ser
 290 295 300
 Asp Asn Tyr Leu Ile Cys Ala His Gln Glu Gly Glu Ser Lys Val Ser

2751

305 310 315 320
 Ile Phe Glu Arg Asp Asn Ile Thr Gly Lys Leu Ser Leu Lys Asp Lys
 325 330 335
 Lys Ala Ile Ala Asn Glu Gly Val Cys Val Leu Leu
 340 345

<210> 6257
 <211> 56
 <212> PRT
 <213> S.epidermidis

<400> 6257
 Asp Gly Gly Gly Gly Gln Ile Arg Thr Ala Glu Pro Glu Gly Ala Asp
 1 5 10 15
 Leu Gln Ser Ala Ala Phe Ser His Phe Ala Thr Pro Pro Lys Trp Cys
 20 25 30
 Arg Pro Glu Asp Leu Asn Pro Gln Pro Thr Asp Tyr Lys Ser Val Ala
 35 40 45
 Leu Pro Ile Glu Leu Gly Arg Leu
 50 55

<210> 6258
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 6258
 Asn Glu Leu Gly Val Cys Leu Asn Ile Ile Asn Trp Gly Asp Tyr Asp
 1 5 10 15
 Leu Trp Leu Thr Gln Ile Glu Lys Ala Lys Lys Cys Gln Met Leu Asn
 20 25 30
 Ala Ser Lys Gln Asp Arg Tyr Ile His Lys Ile Pro Ile Ile Ile Thr
 35 40 45
 Gln Cys Ser Val Glu Leu
 50

<210> 6259
 <211> 187
 <212> PRT
 <213> S.epidermidis

<400> 6259
 Ile Glu Met Gly Lys Leu Gly Gln Gln Ile Ile Gly Tyr His Cys Asn
 1 5 10 15
 Asp Glu Val Lys Ile Asp Lys Phe Lys Asn Arg Glu Val Ser Leu Leu
 20 25 30
 Ile Ser Tyr Glu Asp Asp Ile Trp Leu Gly Asn Gly Met Tyr Phe Trp
 35 40 45
 Glu Asn Lys Ser Asn Leu Asp Tyr Trp Lys Arg Asn Arg Glu Arg Asn
 50 55 60
 Tyr Pro Asp Lys Asn Phe Ser Ser Val Glu Val Met Leu Ser Leu Asp
 65 70 75 80
 Phe Leu Leu Asp Leu Ser Asp Lys Glu His Arg Lys Phe Cys Lys Lys
 85 90 95
 Val Leu Ser Asp Leu Ile Glu Arg Gly Lys Asp Asn Gly Ile Asp Glu
 100 105 110

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Ser Ile Phe Asn Asn Asp Leu Gly Glu Val Ile Asn Val Leu Phe Ser
 115 120 125
 Lys Thr Asp Ile Leu Ala Ser His Phe Asn Val Leu Arg Thr His Gly
 130 135 140
 Leu Tyr Asn Trp Ser Glu Asp Lys Phe Leu Val Gly Asn Asp Asn Lys
 145 150 155 160
 Tyr Gln Ser Val Asn Arg Pro Thr Ser Asn Val Lys Thr Ile Tyr Cys
 165 170 175
 Val Lys Asn Glu Arg Ala Ile Leu Glu Ile Leu
 180 185

<210> 6260

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6260

Arg Ala Ala Gly Val Arg Ile Pro Leu Pro Pro Pro Leu Ile Ile Ser
 1 5 10 15
 Ala Gly Trp Ser Ser Ser Val Ala Arg Arg Ala His Asn Pro Lys Val
 20 25 30
 Gly Gly Ser Asn Pro Pro Pro Ala Ile Leu Leu Ile
 35 40

<210> 6261

<211> 518

<212> PRT

<213> S.epidermidis

<400> 6261

Leu Ile Lys Gly Val Leu Ile Met Leu Thr Leu Gly Thr Ala Leu Ser
 1 5 10 15
 Asn Gln Ile Asp Ala Asn Trp Gln Thr Tyr Val Met Ile Ile Val Tyr
 20 25 30
 Phe Ile Ile Leu Leu Ile Ile Gly Phe Tyr Gly Tyr Arg Gln Ala Thr
 35 40 45
 Gly Asn Leu Ser Glu Phe Met Leu Gly Gly Arg Ser Ile Gly Pro Tyr
 50 55 60
 Ile Thr Ala Leu Ser Ala Gly Ala Ser Asp Met Ser Gly Trp Met Ile
 65 70 75 80
 Met Gly Leu Pro Gly Ser Val Tyr Ser Thr Gly Leu Ser Ala Ile Trp
 85 90 95
 Ile Thr Ile Gly Leu Thr Leu Gly Ala Tyr Ile Asn Tyr Phe Val Val
 100 105 110
 Ala Pro Arg Leu Arg Val Tyr Thr Glu Ile Ala Gly Asp Ala Ile Thr
 115 120 125
 Leu Pro Asp Phe Phe Lys Asn Arg Leu Asp Asp Lys Lys Asn Ile Ile
 130 135 140
 Lys Ile Ile Ser Gly Leu Ile Ile Val Val Phe Phe Thr Leu Tyr Thr
 145 150 155 160
 His Ser Gly Phe Val Ser Gly Gly Lys Leu Phe Glu Ser Ala Phe Gly
 165 170 175
 Leu Asn Tyr His Ala Gly Leu Leu Ile Val Ala Ile Ile Val Ile Phe
 180 185 190
 Tyr Thr Phe Phe Gly Gly Tyr Leu Ala Val Ser Ile Thr Asp Phe Phe
 195 200 205

Gln Gly Val Ile Met Leu Ile Ala Met Val Met Val Pro Ile Val Ala
 210 215 220
 Leu Leu Lys Leu Asn Gly Trp Asp Thr Phe His Asp Ile Ala Gln Met
 225 230 235 240
 Lys Pro Thr Asn Leu Asp Leu Phe Arg Gly Thr Thr Val Leu Gly Ile
 245 250 255
 Val Ser Leu Phe Ser Trp Gly Leu Gly Tyr Phe Gly Gln Pro His Ile
 260 265 270
 Ile Val Arg Phe Met Ser Ile Lys Ser His Lys Leu Leu Pro Lys Ala
 275 280 285
 Arg Arg Leu Gly Ile Ser Trp Met Ala Val Gly Leu Leu Gly Ala Ile
 290 295 300
 Gly Val Gly Leu Thr Gly Ile Ser Phe Ile Ser Glu Arg His Ile Lys
 305 310 315 320
 Leu Glu Asp Pro Glu Thr Leu Phe Ile Val Met Ser Gln Ile Leu Phe
 325 330 335
 His Pro Leu Val Gly Gly Phe Leu Leu Ala Ala Ile Leu Ala Ala Ile
 340 345 350
 Met Ser Thr Ile Ser Ser Gln Leu Leu Val Thr Ser Ser Ser Leu Thr
 355 360 365
 Glu Asp Phe Tyr Lys Leu Ile Arg Gly Ser Asp Lys Ala Ser Ser His
 370 375 380
 Gln Lys Glu Phe Val Leu Ile Gly Arg Leu Ser Val Leu Leu Val Ala
 385 390 395 400
 Ile Val Ala Ile Thr Ile Ala Trp His Pro Asn Asp Thr Ile Leu Asn
 405 410 415
 Leu Val Gly Asn Ala Trp Ala Gly Phe Gly Ala Ala Phe Ser Pro Leu
 420 425 430
 Val Leu Tyr Ser Leu Tyr Trp Lys Asp Leu Thr Arg Ala Gly Ala Ile
 435 440 445
 Ser Gly Met Val Ala Gly Ala Val Val Val Ile Val Trp Ile Ser Trp
 450 455 460
 Ile Lys Pro Leu Ala Thr Ile Asn Ala Phe Phe Gly Met Tyr Glu Ile
 465 470 475 480
 Ile Pro Gly Phe Ile Val Ser Val Leu Ile Thr Tyr Ile Val Ser Lys
 485 490 495
 Leu Thr Lys Lys Pro Asp Asp Tyr Val Ile Glu Asn Leu Asn Lys Val
 500 505 510
 Lys His Val Val Lys Glu
 515

<210> 6262

<211> 238

<212> PRT

<213> S.epidermidis

<400> 6262

Met Lys Ile Phe Val Cys Glu Asp Asp Gln Arg Gln Arg Glu His Met
 1 5 10 15
 Val Ser Ile Ile Lys Asn Tyr Ile Met Ile Glu Glu Lys Pro Met Glu
 20 25 30
 Leu Ala Leu Ala Thr Asn Asp Pro Tyr Glu Val Leu Glu Gln Ser Lys
 35 40 45
 Glu Leu Asn Asp Ile Gly Cys Tyr Phe Leu Asp Ile Gln Leu Glu Ala
 50 55 60
 Asp Met Asn Gly Ile Lys Leu Ala Ser Glu Ile Arg Lys His Asp Pro

				85					90					95			
Phe	Thr	Lys	Asn	Asp	Val	Pro	Thr	Phe	Ala	Ile	Cys	His	Gly	Pro	Leu		
			100						105				110				
Val	Leu	Val	Asp	Thr	Asp	Asp	Leu	Lys	Gly	Arg	Thr	Ile	Thr	Gly	Val		
		115					120					125					
Ile	Asn	Val	Arg	Lys	Asp	Leu	Ser	Asn	Ala	Gly	Ala	Asn	Val	Val	Asp		
	130					135					140						
Glu	Ser	Val	Val	Val	Asp	Asn	Asn	Ile	Val	Thr	Ser	Arg	Val	Pro	Asp		
145					150					155					160		
Asp	Leu	Asp	Asp	Phe	Asn	Arg	Glu	Ile	Val	Lys	Lys	Leu	Glu	Ala			
				165					170					175			

<210> 6265

<211> 222

<212> PRT

<213> S.epidermidis

<400> 6265

Asp	Leu	Thr	Met	Lys	Gln	Leu	Met	Ile	Arg	Asn	Leu	Lys	Leu	Arg	Thr		
1				5					10					15			
Trp	Thr	Leu	Ile	Ile	Tyr	Ala	Leu	Leu	Leu	Leu	Phe	Phe	Pro	Ile	Tyr		
		20					25						30				
His	Leu	Leu	Asn	Lys	Asp	Thr	Pro	Leu	Tyr	Ser	Ile	Ile	Ser	Gly	Pro		
		35				40						45					
Ile	Gly	Leu	Ile	Leu	Thr	Met	Ile	Cys	Leu	Ile	Asp	Ile	Gly	His	Leu		
	50				55						60						
Phe	Arg	Val	Asn	Arg	Arg	Leu	Arg	Gly	Ser	Ser	Ser	Tyr	Tyr	Phe	Phe		
65				70					75						80		
Tyr	Ser	Leu	Pro	Val	Ser	Lys	Arg	Asp	Leu	Leu	Asn	Ala	Asn	Tyr	Met		
			85					90						95			
Thr	Cys	Ile	Leu	Leu	Thr	Phe	Ile	Gly	Glu	Leu	Ile	Ile	Ser	Leu	Tyr		
		100						105					110				
Gly	Tyr	Tyr	Thr	Ser	Thr	Ile	Lys	Thr	Asp	Ser	Ile	Tyr	Phe	Ser	Thr		
		115				120						125					
Thr	Phe	Ser	Phe	Ile	Val	Gly	Asn	Phe	Phe	Ser	Ile	Pro	Ile	Ala	Phe		
	130					135					140						
Ser	Lys	Ser	Thr	Glu	Arg	Lys	Asp	Arg	Asp	Ile	Pro	Tyr	Ile	Ala	Tyr		
145				150					155						160		
Ile	Val	Gly	Ile	Met	Val	Val	Leu	Pro	Phe	Thr	Leu	Ser	Val	Ile	Phe		
			165					170						175			
Ile	Leu	Ile	Asn	Tyr	Leu	Thr	His	Asn	Asp	Ser	His	Ile	Pro	Met	Ile		
		180				185							190				
Tyr	Ser	Tyr	Phe	Leu	Asn	Tyr	Gly	Leu	Leu	Val	Val	Ser	Ser	Ile	Phe		
	195					200						205					
Leu	Val	Ile	Asn	Tyr	Leu	Ile	Gln	Ile	Lys	Lys	Ile	Lys	Tyr				
	210				215						220						

<210> 6266

<211> 466

<212> PRT

<213> S.epidermidis

<400> 6266

Phe	Phe	Tyr	Ile	Leu	Glu	Leu	Thr	Lys	Asp	Cys	Asn	Gly	Glu	Val	Val		
1				5					10					15			
Glu	Phe	Met	Lys	Lys	Phe	Asn	Ile	Lys	His	Ser	Phe	Met	Leu	Thr	Gly		

465

<210> 6267

<211> 50

<212> PRT

<213> S.epidermidis

<400> 6267

Gln Ala Tyr Ile Ser Lys Leu Ile Ile Asp Leu Lys Ile Ser Phe Leu
 1 5 10 15
 Ile Phe His Leu Val Ser Ile Val Ile Lys Asn Leu Ile Lys Ile Cys
 20 25 30
 Asn Tyr Ile His Ile Thr Thr Tyr Val Glu Lys Asp Arg Thr Met Asn
 35 40 45
 Leu Phe
 50

<210> 6268

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6268

Val Phe Asn Ile Glu Lys Val Trp Ile Val His Pro His Ser Met Thr
 1 5 10 15
 Asn Tyr Ser Leu Ile Leu Phe Leu Asn Asn Pro Asn Lys Pro Asn Pro
 20 25 30
 Val Ser Asn Ile Ile Lys Ala Gly Phe
 35 40

<210> 6269

<211> 608

<212> PRT

<213> S.epidermidis

<400> 6269

Ile Asn Asn Ile Thr Ile Val Ile Phe Ala Ser Ile Val Tyr Tyr Lys
 1 5 10 15
 Tyr Leu Lys Glu Gly Val Glu Met Ala Lys Leu Leu Ile Met Ser Ile
 20 25 30
 Val Ser Phe Cys Phe Ile Phe Leu Leu Leu Phe Phe Arg Tyr Ile
 35 40 45
 Leu Lys Arg Tyr Phe Asn Tyr Met Leu Asn Tyr Lys Val Trp Tyr Leu
 50 55 60
 Thr Leu Leu Ala Gly Leu Ile Pro Phe Ile Pro Ile Lys Phe Ser Phe
 65 70 75 80
 Phe Lys Phe Asn Asn Leu Asn Asn Gln Glu Pro Thr Val Glu Ser Asn
 85 90 95
 Ser His Asn Leu Asn Pro Asn Ile Asn Thr Thr Lys Pro Val His Glu
 100 105 110
 Phe Thr Thr Asp Ile His Lys Phe Asn Trp Asp Ser Ile Asp Asn Ile
 115 120 125
 Cys Thr Val Ile Trp Ile Val Leu Val Ile Ile Leu Ser Phe Lys Phe
 130 135 140
 Leu Asn Ser Leu Leu Tyr Leu Lys Tyr Leu Lys Lys Gln Ser Leu Tyr
 145 150 155 160

Leu Asn Glu Lys Glu Lys Asp Lys Ile Asn Lys Ile Leu Phe Asn His
 165 170 175
 Gln Tyr Lys Arg Asn Ile Val Ile Arg Lys Ala Glu Ser Ile His Ser
 180 185 190
 Pro Ile Thr Phe Trp Tyr Gly Lys Tyr Ile Ile Leu Ile Pro Ser Leu
 195 200 205
 Tyr Phe Lys Ser Ile Asn Asp Lys Lys Leu Lys Tyr Ile Ile Leu His
 210 215 220
 Glu Tyr Ala His Ala Lys Asn Arg Asp Thr Leu His Leu Ile Ile Phe
 225 230 235 240
 His Ile Phe Ser Ile Ala Met Ser Tyr Asn Pro Leu Ile Gln Ile Val
 245 250 255
 Lys Arg Lys Met Ile His Asp Asn Glu Val Glu Ala Asp Arg Phe Val
 260 265 270
 Leu Asn Asn Ile Asn Lys Asn Glu Phe Lys Ser Tyr Ala Glu Ala Ile
 275 280 285
 Met Asp Ser Val Leu Lys Thr Ser Phe Phe Asn Lys Asn Ile Leu Ser
 290 295 300
 His Ser Phe Asn Gly Lys Lys Ser Leu Leu Lys Arg Arg Leu Ile Asn
 305 310 315 320
 Ile Lys Glu Gly Asn Leu Lys Lys Gln Ser Lys Leu Ile Leu Ile Phe
 325 330 335
 Ile Cys Ile Phe Thr Phe Phe Ile Met Ile Ile Gln Ser Gln Phe Leu
 340 345 350
 Met Gly Gln Ser Leu Thr Asp Tyr Asn Tyr Lys Lys Pro Leu Gln Ser
 355 360 365
 Asp Tyr Gln Ile Leu Asp Glu Ser Lys Asn Phe Gly Ser Asn Ser Gly
 370 375 380
 Ser Phe Val Met Tyr Ser Met Lys Lys Asp Lys Tyr Tyr Ile Tyr Asn
 385 390 395 400
 Glu Lys Glu Ser Arg Lys Arg Tyr Ser Pro Asp Ser Thr Tyr Lys Ile
 405 410 415
 Tyr Leu Ala Leu Phe Gly Leu Asp Arg His Ile Ile Ser Asp Lys Asn
 420 425 430
 Ser Arg Met Ser Trp Asn His Asn His Tyr Pro Phe Asp Ser Trp Asn
 435 440 445
 Lys Asp Gln Asp Leu Asn Thr Ala Ile Gln Asn Ser Val Asn Trp Tyr
 450 455 460
 Phe Glu Arg Ile Ser Asn Gln Leu Ser Lys Asn Tyr Thr Ser Asp Gln
 465 470 475 480
 Leu Lys Gln Leu Asn Tyr Gly Asn Lys Asn Leu Gly Ser Tyr Lys Ala
 485 490 495
 Tyr Trp Leu Glu Asp Ser Leu Lys Ile Ser Asn Leu Glu Gln Val Ile
 500 505 510
 Val Leu Lys Asn Met Met Glu Gln Asn Asn His Phe Ser Lys Asn Glu
 515 520 525
 Lys Lys Gln Leu Ser Ser Ser Leu Leu Ile Arg Lys Asn Glu Asn Tyr
 530 535 540
 Glu Leu Tyr Gly Lys Thr Gly Thr Gly Ile Val Asn Gly Lys Tyr Asn
 545 550 555 560
 Asn Gly Trp Phe Val Gly Tyr Val Ile Thr Asn His Asp Lys Tyr Tyr
 565 570 575
 Phe Ser Thr His Leu Ser Asp Glu Lys Ala Ser Gly Glu Asn Ala Lys
 580 585 590
 Phe Ile Asn Glu Lys Ile Leu Lys Glu Met Gly Val Leu Asn Gly Gln
 595 600 605

<210> 6270
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6270

Pro	Leu	Leu	Leu	Thr	Phe	Gln	His	Arg	Ala	Gly	Val	Ser	Pro	Tyr	Thr
1				5					10					15	
Ser	Pro	Tyr	Gly	Leu	Ala	Glu	Thr	Cys	Val	Phe	Asp	Lys	Gln	Ser	Leu
			20					25					30		
Gly	Pro	Ile	His	Cys	Gly	Ser	Ser	Gly	Arg	Glu	Pro				
		35					40								

<210> 6271
 <211> 355
 <212> PRT
 <213> S.epidermidis

<400> 6271

Ser	Lys	Asn	Ile	Arg	Arg	Asp	Tyr	Lys	Met	Gln	Lys	Val	Arg	Ser	Asp
1				5					10					15	
Ile	Met	Thr	His	Arg	Gly	Ser	His	Tyr	Asp	Leu	Gly	Val	Lys	Thr	Ala
			20					25					30		
Leu	Trp	Leu	Gln	Thr	Thr	Pro	Leu	Leu	Lys	Asn	Arg	Asn	Lys	Glu	Trp
		35					40					45			
Arg	Lys	Arg	Ile	Pro	Arg	Phe	Asp	Ile	Asp	Val	Lys	Glu	Thr	Tyr	Asp
	50					55				60					
Ile	Phe	Gln	Ile	Tyr	Ser	Pro	Gln	Ile	Trp	Glu	Glu	Ile	Ile	Gly	Met
65					70					75					80
Gln	Asp	Val	Leu	Asn	Leu	Pro	Thr	Lys	Gln	Met	Ile	Leu	Asn	Phe	Gly
				85					90					95	
His	Tyr	Arg	Phe	Thr	Asp	Leu	Lys	Asp	Ser	Gly	Cys	Thr	Val	Tyr	Lys
			100					105					110		
Gly	Arg	Asp	Phe	Leu	Val	Arg	Asn	Tyr	Asp	Tyr	His	Pro	Ala	Thr	Tyr
		115					120					125			
Asp	Gly	Arg	Tyr	Leu	Leu	Phe	Gln	Pro	Asn	Asp	Gly	Gly	Leu	Ser	Gln
	130					135					140				
Ile	Gly	Pro	Thr	Ser	Arg	Val	Thr	Gly	Arg	Met	Asp	Gly	Met	Asn	Glu
145					150					155					160
Tyr	Gly	Leu	Val	Met	Ala	Tyr	Asn	Phe	Met	His	Arg	Lys	Lys	Pro	Ala
				165					170					175	
Asn	Gly	Phe	Val	Cys	Tyr	Met	Val	Gly	Arg	Leu	Ile	Leu	Glu	Asn	Cys
			180					185					190		
Lys	Asn	Val	Thr	Glu	Ala	Ile	Lys	Phe	Leu	Lys	Glu	Val	Pro	His	Arg
		195					200					205			
Ser	Ser	Phe	Ser	Tyr	Ile	Leu	Met	Asp	Arg	His	Ser	Asn	Tyr	Ala	Ile
		210				215						220			
Val	Glu	Val	Thr	Pro	Arg	Ser	Ile	Asp	Val	Arg	Tyr	Glu	His	Ile	Cys
225					230					235					240
Thr	Asn	His	Phe	Glu	Leu	Leu	Thr	His	Glu	Asn	Arg	Asn	Tyr	Thr	Arg
			245						250					255	
Glu	Ser	Lys	Glu	Arg	Leu	Asn	Arg	Val	Ile	Asn	Lys	Thr	Thr	Pro	Ser
			260					265					270		
Thr	Asn	Lys	Asp	Ile	Ala	Phe	Lys	Leu	Phe	Asn	Asp	Pro	Gln	Tyr	Glu
		275					280					285			


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Ile Ile Glu Ile Asp Glu Gly Ser Ile Pro Arg Val Leu Asn Glu Val
  130          135          140
Thr Pro Ser Met Met Val Phe Thr Asn Phe Phe Arg Asp Gln Met Asp
145          150          155          160
Arg Phe Gly Glu Ile Asp Ile Met Val Asp Asn Ile Ala Lys Ser Ile
          165          170          175
Ser Asn Lys Gly Ile Lys Leu Leu Leu Asn Ala Asp Asp Pro Phe Val
          180          185          190
Ser Arg Leu Lys Ile Ala Ser His Ser Ile Val Tyr Tyr Gly Met Lys
          195          200          205
Lys Phe Ala His Asp Phe Glu Gln Ser Thr Met Asn Glu Ser Lys Tyr
          210          215          220
Cys Pro Asn Cys Gly Arg Leu Leu Gln Tyr Asp Tyr Ile His Tyr Asn
225          230          235          240
Gln Ile Gly His Tyr His Cys Glu Cys Gly Phe Lys Arg Glu Glu Pro
          245          250          255
Thr Tyr Glu Val Ser Ser Phe Asp Ala Ser Pro Phe Leu Lys Met Ile
          260          265          270
Ile Asn Gln Ser Glu Phe Asn Met Lys Ile Ala Gly Asp Phe Asn Ser
          275          280          285
Tyr Asn Ala Ile Ala Ala Tyr Thr Val Leu Arg Glu Leu Gly Leu Asn
          290          295          300
Asp Asp Ala Ile Arg Lys Gly Phe Glu Thr Tyr Thr Ser Asp Asn Gly
305          310          315          320
Arg Met Gln Tyr Phe Ser Lys Asn Lys Lys Glu Ala Met Ile Asn Leu
          325          330          335
Ala Lys Asn Pro Ala Gly Met Asn Ala Ser Leu Ser Val Gly Glu Gln
          340          345          350
Ile Asp Asp Lys Lys Ile Tyr Val Ile Ser Leu Asn Asp Asn Ala Ala
          355          360          365
Asp Gly Arg Asp Ile Ser Trp Ile Tyr Asp Ala Asp Phe Glu Lys Leu
          370          375          380
Ala Thr Gln Asp Ile Glu Ala Ile Ile Val Ser Gly Thr Arg Ala Glu
385          390          395          400
Glu Leu Gln Leu Arg Leu Lys Leu Ala Glu Val Glu Val Pro Ile Lys
          405          410          415
Val Glu Lys Asp Ile Tyr Lys Ala Thr Ala Leu Thr Met Lys Tyr Ser
          420          425          430
Ser Phe Thr Val Ala Ile Pro Asn Tyr Thr Ser Leu Thr Pro Met Leu
          435          440          445
Glu Gln Leu Asn Arg Ser Phe Glu Gly Gly Gln Ser
          450          455          460

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<210> 6274

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6274

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Tyr Asn Ile Ile His Lys Trp Leu Ile Lys Tyr Cys Phe Tyr Lys Leu
1          5          10          15
Ile Pro Leu Tyr Ser Phe His Phe Tyr Leu Phe Ser Arg Leu Ile Ser
          20          25          30
Lys Leu Arg His Ser Phe Leu Ile Leu
          35          40

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<210> 6275
 <211> 101
 <212> PRT
 <213> S.epidermidis

<400> 6275
 Ser Asp Leu Ile Lys Tyr Leu Asp Gln Ile Tyr Glu Ile Lys Ser Asp
 1 5 10 15
 Ile Ile Ile Ile Lys Ile Ile Asp Lys His Gln Phe Ser Leu Ala Glu
 20 25 30
 Ser Thr Lys Ser Leu Asn His Leu Ile Phe Leu Phe Leu Tyr Ile Tyr
 35 40 45
 Ala Tyr Ile Ile Ile Ala Arg Ser Ile Ile Ile Phe Ile Asn Leu Met
 50 55 60
 Leu Leu Leu Ser Thr Phe Phe Asn Phe Ser Val Gly Leu Gln Lys Ser
 65 70 75 80
 Ile Asn Thr Val Tyr Glu Leu Ser Asn Ile Tyr Val Lys Asn Lys Gly
 85 90 95
 Ile Ile Lys Lys Arg
 100

<210> 6276
 <211> 285
 <212> PRT
 <213> S.epidermidis

<400> 6276
 Cys Val Ile Ile Tyr Val Arg Lys Thr Phe Glu Tyr Arg Ser Arg Asp
 1 5 10 15
 Ser Lys Met Pro Lys Val Thr Lys Ile Glu Val Gln Lys Lys Asn Lys
 20 25 30
 Glu Arg Phe Asn Leu Phe Leu Asp Gly Glu Phe Glu Met Gly Ile Asp
 35 40 45
 Ile Asp Thr Leu Val Lys Phe Asn Leu Lys Lys Asp Gln Ile Leu Glu
 50 55 60
 Pro Ser Asp Met Gln Asn Ile Gln Glu Tyr Asp His Tyr Arg Arg Gly
 65 70 75 80
 Val Asn Leu Ala Ile Gln Tyr Leu Ser Tyr Lys Lys Arg Thr Glu Arg
 85 90 95
 Glu Val Ile Gln Tyr Leu Glu Lys Asn Asp Ile Gln Ser Asn Ala Ile
 100 105 110
 Gln Asp Val Ile Asp Tyr Cys Tyr Lys Glu Lys Phe Ile Asp His Glu
 115 120 125
 Asp Tyr Ala Glu Ser Leu Lys Asn Thr Met Ile His Thr Thr Asp Lys
 130 135 140
 Gly Pro Glu Ile Tyr Arg Gln Lys Leu Tyr Gln Leu Gly Ile Glu Val
 145 150 155 160
 Thr Ile Ile Glu Lys Tyr Val Glu Ala Tyr Glu Gln Gln Gln Pro Leu
 165 170 175
 Asp Asp Val Ile Lys Val Ala Glu Lys Val Met Lys Ser Lys Lys Gly
 180 185 190
 Pro Glu Ala Lys Val Lys Gln Lys Val Thr Gln Ser Leu Leu Gln Lys
 195 200 205
 Gly Tyr Lys Phe Glu Thr Ile Gln Leu Val Met Asn Glu Ile Asp Phe
 210 215 220
 Ser Gln Asp Glu Glu Thr Leu Asp His Leu Leu Gln Arg Asp Leu Glu

225 230 235 240
 Lys Val Tyr Asn Lys Asn Cys Arg Lys Tyr Asp Ser Asp Lys Ser Val
 245 250 255
 Ile Lys Thr Ile Glu Ala Leu Met Arg Lys Gly Tyr Asn Tyr Asp Lys
 260 265 270
 Ile Lys Ser Lys Leu Glu Glu Ser Gly Ile Ser Asn Glu
 275 280 285

<210> 6277

<211> 193

<212> PRT

<213> S.epidermidis

<400> 6277

Arg Lys Ile Ile Glu Arg Asn Glu Ile Met Val Gln Asn Ala Phe Val
 1 5 10 15
 Ala Leu Asp Phe Glu Thr Ala Asn Ser Lys Arg Thr Ser Ile Cys Ser
 20 25 30
 Val Gly Met Val Lys Val Ile Asp Asn Gln Ile Thr Glu Ser Phe His
 35 40 45
 Thr Leu Val Asn Pro Phe Asp Tyr Phe Thr Glu Thr Asn Ile Thr Val
 50 55 60
 His Gly Ile His Pro Glu Asp Val Gln Asp Ala Pro Gly Phe Lys His
 65 70 75 80
 Val Tyr Pro Tyr Met Leu Lys Phe Ile Asp Gln Leu Pro Val Val Ala
 85 90 95
 His Asn Ala Ala Phe Asp Met Asn Val Leu His Gln Ser Leu Lys Ser
 100 105 110
 His Asn Ile Asp Thr Pro Ser Leu Thr Tyr Phe Cys Ser Tyr Gln Leu
 115 120 125
 Ala Lys Arg Thr Ile Asn Ala Tyr Arg Tyr Gly Leu Lys His Leu Met
 130 135 140
 Asn His Tyr His Leu Asp Phe His Gly His His Asp Ala Leu Asn Asp
 145 150 155 160
 Ala Lys Ala Cys Ala Met Ile Thr Tyr Arg Leu Leu Lys His Tyr Asp
 165 170 175
 Asp Leu Gln Ser Met Leu Ser Ile Tyr Gly Lys Asn Leu Lys Asp Lys
 180 185 190
 Gly

<210> 6278

<211> 381

<212> PRT

<213> S.epidermidis

<400> 6278

Ile Met Ile Ile Ser Asn Lys Ser Pro Ile Ser Ile Asn Asn Asp Pro
 1 5 10 15
 Trp Glu Ala Tyr Asn Asp Ile Leu Glu His Asn Gln Leu Thr Leu Ser
 20 25 30
 Asn Ile Glu Phe Thr Thr Thr Asn Leu Cys Asn Met Arg Cys Ser His
 35 40 45
 Cys Ala Val Gly Tyr Thr Leu Gln Thr Lys Asp Pro Asp Pro Leu Pro
 50 55 60
 Met Asp Ile Ile Tyr Arg Arg Leu Asp Glu Ile Pro Asn Leu Arg Thr

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65          70          75          80
Leu Ser Ile Thr Gly Gly Glu Pro Met Phe Ser Lys Lys Ser Ile Lys
85          90          95
Asn Val Val Lys Pro Leu Leu Lys Tyr Ala Lys His Arg Gly Ile Tyr
100          105          110
Val Gln Met Asn Ser Asn Leu Thr Leu Pro Gln Asp Arg Tyr Leu Asp
115          120          125
Ile Ala Glu Tyr Ile Asp Val Met His Ile Ser His Asn Trp Gly Thr
130          135          140
Ile Gln Glu Phe Thr Asp Val Gly Phe Gly Ala Met Arg Lys Gln Pro
145          150          155          160
Pro Leu Lys Ala Lys Leu Lys Leu Tyr Glu Gln Met Leu Glu Asn Ser
165          170          175
Ser Thr Leu Ser Asp Gln Gly Met Phe Val Ser Ala Glu Thr Met Leu
180          185          190
Asn Gln Ser Thr Val Pro Tyr Leu Ser Lys Ile His Asn Glu Val Val
195          200          205
Asn Asp Met Lys Cys Ser Arg His Glu Ile His Pro Met Tyr Pro Ser
210          215          220
Asp Phe Ala Ser Gln Leu Asn Val Leu Ser Leu Lys Glu Met Lys Glu
225          230          235          240
Ala Ile His His Leu Leu Asp Ile Arg Asp Glu Asn Thr Trp Met Leu
245          250          255
Phe Gly Thr Leu Pro Ile Tyr Pro Cys Leu Asn Asp Glu Tyr Asp Gln
260          265          270
His Leu Leu Gln Arg Leu Arg Lys Ser Lys Asn Val Thr Met Arg Asn
275          280          285
Asp Pro Asp Gly Arg Ser Arg Leu Asn Val Asn Val Phe Thr Gly Asp
290          295          300
Val Ile Val Thr Asp Phe Gly Asp Glu Asn Gly Thr Ile Ser Asn Ile
305          310          315          320
Gln Lys Asp Lys Leu Thr Asp Val Phe Asn Gln Trp Leu Asn Thr Asp
325          330          335
Leu Ala Gln Ser Leu Asn Cys His Cys Ala Glu Tyr Gln Cys Leu Gly
340          345          350
Pro Asn Val Leu Val Lys Asn Met Tyr Tyr Pro Asn Thr Asp Phe Lys
355          360          365
Lys Lys Glu Gln Ile Met His Gln His Gln Ile Phe Ser
370          375          380

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<210> 6279

<211> 59

<212> PRT

<213> S.epidermidis

<400> 6279

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Asn His Lys Ile Gly Thr Ile Leu Arg Phe Tyr Phe Tyr Tyr Phe His
1          5          10          15
Asn Asn Leu Ile Ser Asn Phe Asn Ser Ile Ser Ile His Tyr Ser Asn
20          25          30
Ser Phe Tyr Ile Ile His Ile Lys Leu Ile Thr Arg Asn Lys Lys Arg
35          40          45
Leu Phe Asn Ile Phe Thr Leu Phe Ile Phe Ser
50          55

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<210> 6280

<211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6280

Glu	Leu	Lys	Ile	Ser	Thr	Lys	Thr	Cys	Lys	Asn	Thr	Ala	Ser	Cys	Ala
1				5					10					15	
His	Asn	His	Thr	Cys	Lys	Gly	Phe	Val	Trp	Leu	Asn	Ile	Thr	Asn	Ile
			20					25					30		
Lys	Asn	Val	Ile	Asn	Ile	Gly	His	Asn	Ile	Val	Lys	Gly	Asn	Glu	Cys
		35					40					45			
Val	Ile	Pro	Leu												
			50												

<210> 6281
 <211> 479
 <212> PRT
 <213> S.epidermidis

<400> 6281

Gly	Val	Glu	Ile	Met	His	Phe	Glu	Thr	Val	Ile	Gly	Leu	Glu	Val	His
1				5					10					15	
Val	Glu	Leu	Lys	Thr	Asp	Ser	Lys	Met	Phe	Ser	Pro	Ser	Pro	Ala	His
			20					25					30		
Phe	Gly	Ala	Glu	Pro	Asn	Ser	Asn	Thr	Asn	Val	Ile	Asp	Leu	Ala	Tyr
		35					40					45			
Pro	Gly	Val	Leu	Pro	Val	Val	Asn	Arg	Arg	Ala	Val	Asp	Trp	Ala	Met
	50					55					60				
Arg	Ala	Ser	Met	Ala	Leu	Asn	Met	Asp	Ile	Ala	Thr	Asn	Ser	Lys	Phe
65					70					75					80
Asp	Arg	Lys	Asn	Tyr	Phe	Tyr	Pro	Asp	Asn	Pro	Lys	Ala	Tyr	Gln	Ile
			85						90					95	
Ser	Gln	Phe	Asp	Gln	Pro	Ile	Gly	Glu	Asn	Gly	Tyr	Ile	Asp	Ile	Glu
			100					105					110		
Val	Asp	Gly	Glu	Thr	Lys	Arg	Ile	Gly	Ile	Thr	Arg	Leu	His	Met	Glu
		115					120					125			
Glu	Asp	Ala	Gly	Lys	Ser	Thr	His	Lys	Asp	Gly	Tyr	Ser	Leu	Val	Asp
		130					135				140				
Leu	Asn	Arg	Gln	Gly	Thr	Pro	Leu	Ile	Glu	Ile	Val	Ser	Glu	Pro	Asp
145					150					155				160	
Ile	Arg	Ser	Pro	Lys	Glu	Ala	Tyr	Ala	Tyr	Leu	Glu	Lys	Leu	Arg	Ser
				165					170					175	
Ile	Ile	Gln	Tyr	Thr	Gly	Val	Ser	Asp	Cys	Lys	Met	Glu	Glu	Gly	Ser
		180						185					190		
Leu	Arg	Cys	Asp	Ala	Asn	Ile	Ser	Leu	Arg	Pro	Tyr	Gly	Gln	Lys	Glu
		195					200					205			
Phe	Gly	Thr	Lys	Thr	Glu	Leu	Lys	Asn	Leu	Asn	Ser	Phe	Asn	Tyr	Val
		210				215					220				
Lys	Lys	Gly	Leu	Glu	Tyr	Glu	Glu	Lys	Arg	Gln	Glu	Glu	Glu	Leu	Leu
225					230					235					240
Asn	Gly	Gly	Glu	Ile	Gly	Gln	Glu	Thr	Arg	Arg	Phe	Asp	Glu	Ser	Thr
				245					250					255	
Gly	Lys	Thr	Ile	Leu	Met	Arg	Val	Lys	Glu	Gly	Ser	Asp	Asp	Tyr	Arg
			260					265					270		
Tyr	Phe	Pro	Glu	Pro	Asp	Ile	Val	Pro	Leu	Tyr	Val	Asp	Glu	Asp	Trp
		275					280						285		

Lys Ala Arg Val Arg Glu Thr Ile Pro Glu Leu Pro Asp Glu Arg Lys
 290 295 300
 Ala Lys Tyr Val Asn Asp Leu Gly Leu Pro Glu Tyr Asp Ala His Val
 305 310 315 320
 Leu Thr Leu Thr Lys Glu Met Ser Asp Phe Phe Glu Gly Ala Ile Asp
 325 330 335
 His Gly Ala Asp Val Lys Leu Thr Ser Asn Trp Leu Met Gly Gly Val
 340 345 350
 Asn Glu Tyr Leu Asn Lys Asn Gln Val Glu Leu Lys Asp Thr Gln Leu
 355 360 365
 Thr Pro Glu Asn Leu Ala Gly Met Ile Lys Leu Ile Glu Asp Gly Thr
 370 375 380
 Met Ser Ser Lys Ile Ala Lys Lys Val Phe Pro Glu Leu Ala Glu Asn
 385 390 395 400
 Gly Gly Asp Ala Lys Gln Ile Met Glu Asp Lys Gly Leu Val Gln Ile
 405 410 415
 Ser Asp Glu Ala Thr Leu Leu Lys Phe Val Thr Asp Ala Leu Asp Asn
 420 425 430
 Asn Pro Gln Ser Ile Glu Asp Tyr Lys Asn Gly Lys Gly Lys Ala Met
 435 440 445
 Gly Phe Leu Val Gly Gln Ile Met Lys Ala Ser Lys Gly Gln Ala Asn
 450 455 460
 Pro Gln Lys Val Asn Ser Leu Leu Lys Gln Glu Leu Asp Asn Arg
 465 470 475

<210> 6282

<211> 159

<212> PRT

<213> S.epidermidis

<400> 6282

Phe Gly Val Ile Leu Met Ile His Val Ala Phe Val Cys Leu Gly Asn
 1 5 10 15
 Ile Cys Arg Ser Pro Met Ala Glu Ala Ile Met Arg Gln Arg Leu Gln
 20 25 30
 Glu Arg Gly Ile Ser Asp Ile Lys Val His Ser Arg Gly Thr Gly Arg
 35 40 45
 Trp Asn Leu Gly Glu Pro Pro His Asn Gly Thr Gln Lys Ile Leu Gln
 50 55 60
 Lys Tyr His Ile Pro Tyr Asp Gly Met Val Ser Glu Leu Phe Glu Pro
 65 70 75 80
 Asp Asp Asp Phe Asp Tyr Ile Ile Ala Met Asp Gln Ser Asn Val Asp
 85 90 95
 Asn Ile Lys Gln Ile Asn Pro Asn Leu Gln Gly Gln Leu Phe Lys Leu
 100 105 110
 Leu Glu Phe Ser Asn Met Glu Glu Ser Asp Val Pro Asp Pro Tyr Tyr
 115 120 125
 Thr Asn Asn Phe Glu Gly Val Phe Glu Met Val Gln Ser Ser Cys Asp
 130 135 140
 Asn Leu Ile Asp Tyr Ile Val Lys Asp Ala Asn Leu Lys Glu Arg
 145 150 155

<210> 6283

<211> 359

<212> PRT

<213> S.epidermidis

<400> 6283

Gly Glu Ser Met Thr Glu Arg Arg Ile Ile His Ile Asp Met Asp Tyr
 1 5 10 15
 Phe Phe Ala Gln Val Glu Met Arg Asp Asn Pro Lys Leu Lys Gly Lys
 20 25 30
 Pro Val Ile Val Gly Gly Lys Ala Ser His Arg Gly Val Val Ser Thr
 35 40 45
 Ala Ser Tyr Glu Ala Arg Ala Tyr Gly Val His Ser Ala Met Pro Met
 50 55 60
 Thr Gln Ala His Lys Leu Cys Pro Asn Gly Tyr Tyr Val Thr Ser Arg
 65 70 75 80
 Phe Asp Thr Tyr Arg Glu Val Ser Gly Gln Ile Met Lys Ile Phe Arg
 85 90 95
 Ser Tyr Thr Glu Leu Val Glu Pro Met Ser Leu Asp Glu Ala Tyr Leu
 100 105 110
 Asp Ile Thr His Leu Val Arg Pro Asp Leu Pro Ala Ser Thr Ile Ala
 115 120 125
 Asn Tyr Ile Arg Arg Asp Ile Tyr Glu Val Thr Ser Leu Thr Ala Ser
 130 135 140
 Ala Gly Val Ser Tyr Asn Lys Phe Leu Ala Lys Leu Ala Ser Gly Met
 145 150 155 160
 Asn Lys Pro Asn Gly Leu Thr Val Ile Asp Tyr Asn Asn Val His Glu
 165 170 175
 Ile Leu Met Gln Leu Asp Ile Gly Asp Phe Pro Gly Val Gly Lys Ala
 180 185 190
 Ser Lys Lys Lys Met His Gln His Ile Tyr Thr Gly Gln Asp Leu
 195 200 205
 Tyr Asn Lys Asp Glu Phe Glu Leu Ile Arg Leu Phe Gly Lys Arg Gly
 210 215 220
 Arg Gly Leu Tyr Asn Lys Ala Arg Gly Ile Asp His Asn Glu Val Lys
 225 230 235 240
 Ala Ser Arg Val Arg Lys Ser Val Gly Thr Glu Arg Thr Phe Ser Thr
 245 250 255
 Asp Val Asn Asp Asp Asp Val Ile Leu Arg Lys Ile Arg Glu Leu Ser
 260 265 270
 Gly Lys Thr Ala Glu Arg Leu Asn Lys Ile Gln Lys Ser Gly Lys Thr
 275 280 285
 Val Thr Val Lys Ile Lys Thr Tyr Gln Tyr Glu Thr Ile Ser Lys Gln
 290 295 300
 Lys Ser Leu Arg Asp Pro Ile Arg Thr Glu Thr Asp Ile Tyr Asn Ile
 305 310 315 320
 Ala Tyr Thr Leu Tyr Asn Asp Leu Lys Asp Pro Glu Ile Pro Ile Arg
 325 330 335
 Leu Ile Gly Val Thr Val Gly Ser Leu Glu Gln Ser Asp Phe Lys Asn
 340 345 350
 Leu Thr Ile Tyr Asp Phe Ile
 355

<210> 6284

<211> 45

<212> PRT

<213> S.epidermidis

<400> 6284

Phe Ser Lys Ile Phe Cys Leu Ala Thr Ser Tyr Ser Ser Val Thr Ser

1 5 10 15
 Val Arg Leu Pro Ser Ala Leu Arg Ser Leu Thr Ser Val Phe Gly Met
 20 25 30
 Gly Thr Gly Val Thr Ser Leu Pro Leu Ser Pro Asp Lys
 35 40 45

<210> 6285
 <211> 56
 <212> PRT
 <213> S.epidermidis

<400> 6285
 Met Lys His Leu Thr Lys Ile Phe Val Gly Leu Ala Ile Val Leu Phe
 1 5 10 15
 Ile Val Gly Tyr Tyr Leu Gln Ala Thr Asp His Asp Ser Gln Gly Ile
 20 25 30
 Lys Leu Leu Leu Ala Ala Ile Met Phe Met Ile Cys Ala Phe Ile Asn
 35 40 45
 Arg His Asn Glu Arg Lys Lys Lys
 50 55

<210> 6286
 <211> 144
 <212> PRT
 <213> S.epidermidis

<400> 6286
 Ile Ser Phe Val Leu Pro Val Ser Gly Asn Leu Ser Cys Thr Ser Leu
 1 5 10 15
 Leu Leu Ser Phe Leu Glu Val Val Val Ile Ser Ser Ser Leu Ser Phe
 20 25 30
 Leu Val Ile Phe Val Ser Phe Ser Ser Leu Pro Leu Phe Gly Ile Thr
 35 40 45
 Gly Leu Phe Ser Ser Leu Ser Phe Phe Lys Val Phe Val Ile Phe Phe
 50 55 60
 Ser Leu Ser Phe Phe Gly Val Phe Val Ser Ser Ser Phe Ser Thr Leu
 65 70 75 80
 Pro Leu Leu Gly Ile Thr Gly Phe Phe Ser Ser Leu Ser Phe Phe Gly
 85 90 95
 Val Phe Met Ser Phe Phe Ser Leu Ser Phe Phe Gly Val Phe Val Ser
 100 105 110
 Leu Asp Ser Phe Ser Ser Leu Ser Phe Phe Ser Val Phe Val Ser Ser
 115 120 125
 Ser Phe Ser Phe Leu Val Ile Cys Val Phe Val Thr Glu Val Phe Ala
 130 135 140

<210> 6287
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 6287
 Thr Gln Val Val Ile Ser Lys Ile Ser Phe Thr Tyr Gln Asn Ser Val
 1 5 10 15
 Phe Tyr His Leu Phe Asn Ala Ile Lys Lys Thr Val Glu Lys Val Lys
 20 25 30

Asn Phe Asn Asn Ser Leu Asn Gln
35 40

<210> 6288
<211> 300
<212> PRT
<213> S.epidermidis

<400> 6288
Ala Leu Asn Val Gly Lys Ile Ser Ile Ser Val Phe Leu Lys Leu Leu
1 5 10 15
Asn Thr Leu Lys Arg Trp Arg Met Lys Met Ser Arg Leu Gln Asp Val
20 25 30
Val Val Asn Glu Met Lys Val Lys Lys Gln Ile Asp Ser Val Glu Glu
35 40 45
Ile Gln Glu Ile Lys Gln Phe Ile Lys Ala Tyr Val Lys Ser His Ser
50 55 60
Phe Ile Gln Thr Leu Val Leu Gly Ile Ser Gly Gly Gln Asp Ser Thr
65 70 75 80
Leu Thr Gly Lys Leu Ala Gln Leu Ala Val Asn Glu Leu Lys Glu Glu
85 90 95
Gly Arg Asn Cys Lys Phe Ile Ala Val Lys Leu Pro Tyr Gly Val Gln
100 105 110
Gln Asp Ala His Glu Val Glu Asp Ala Leu Glu Phe Ile Asn Pro Asp
115 120 125
Thr Thr Tyr Thr Val Asn Ile Lys Pro Ala Val Asp Gln Ser Val Gln
130 135 140
Ser Leu Ser Glu Ala Gly Ile Lys Leu Thr Asp Phe Gln Lys Gly Asn
145 150 155 160
Glu Lys Ala Arg Glu Arg Met Lys Val Gln Phe Ser Ile Ala Ser Asn
165 170 175
Thr Gln Gly Ile Val Leu Gly Thr Asp His Ser Ala Glu Asn Ile Thr
180 185 190
Gly Phe Tyr Thr Lys Tyr Gly Asp Gly Ala Ala Asp Ile Ala Pro Ile
195 200 205
Phe Gly Leu Asn Lys Arg Gln Gly Lys Gln Leu Leu Ala Tyr Leu Gly
210 215 220
Ala Pro Lys His Leu Tyr Glu Lys Val Pro Thr Ala Asp Leu Glu Asp
225 230 235 240
Asp Lys Pro Gln Leu Pro Asp Glu Glu Ala Leu Gly Val Ser Tyr His
245 250 255
Asp Ile Asp Asp Tyr Leu Glu Gly Lys Glu Ile Pro Gly Thr Ala Arg
260 265 270
Glu Thr Ile Glu Lys His Tyr Val Arg Asn Ala His Lys Arg Glu Leu
275 280 285
Ala Tyr Thr Arg Tyr Ser Trp Pro Lys Tyr Asn Lys
290 295 300

<210> 6289
<211> 281
<212> PRT
<213> S.epidermidis

<400> 6289
Ile Val Gly Val Lys Met Ile Asp Asn Leu Ile Val Tyr Ile Lys Asn
1 5 10 15

115 120 125
 Leu Glu Gly Leu Gly Val Leu Asp Phe Tyr Thr Glu Ser Lys Lys Glu
 130 135 140
 Arg Leu Thr Gly Asp Ile Ile Ile Glu Ser Asp Thr Phe Gly Thr Ile
 145 150 155 160
 Val Gly Phe Glu Asn His Gly Gly Arg Thr Tyr His Pro Tyr Gly Thr
 165 170 175
 Leu Gly Arg Val Thr Tyr Gly Tyr Gly Asn Asn Asp Asn Asp Arg Lys
 180 185 190
 Glu Gly Ile His Tyr Lys Asn Leu Leu Gly Ser Tyr Leu His Gly Pro
 195 200 205
 Ile Leu Pro Lys Asn His Glu Ile Thr Asp Tyr Leu Leu Glu Lys Ala
 210 215 220
 Cys Glu Arg Lys Gly Ile Leu Phe Glu Pro Lys Lys Ile Asp Asn Thr
 225 230 235 240
 Glu Glu Glu Ala Ala Lys Gln Val Leu Ile Lys Arg Ala Lys Glu Asn
 245 250 255
 Lys Lys

<210> 6291
 <211> 118
 <212> PRT
 <213> S.epidermidis

<400> 6291
 Ile Gln Ile Val Ile Gln Ile Gln Ile Val Ile Gln Ile Gln Thr Val
 1 5 10 15
 Thr Gln Ile Gln Ile Val Thr Gln Ile Val Thr Gln Ile Gln
 20 25 30
 Thr Val Ile Gln Thr Gln Ile Val Thr Gln Ile Gln Thr Val Ile Gln
 35 40 45
 Thr Gln Ile Val Ile Gln Ile Gln Ile Val Ile Gln Ile Gln Thr Val
 50 55 60
 Ile Gln Ile Gln Ile Val Ile Gln Thr Leu Val Gln Val Gln Val Arg
 65 70 75 80
 Val His Ile Pro Glu Lys Asn Leu Val Thr Leu Lys Glu Ile Gln Ile
 85 90 95
 Asp Leu Leu Lys Asp Ile Arg Ile Asn Pro Lys Gly Leu Asn Thr Ile
 100 105 110
 Lys Gln Ile Lys Thr Ile
 115

<210> 6292
 <211> 205
 <212> PRT
 <213> S.epidermidis

<400> 6292
 Lys Asn Lys Val Leu Thr Phe Leu Arg Arg Ser Met Met Lys Leu Gln
 1 5 10 15
 His Ile Thr Lys Lys Tyr Gly Gln Asn Thr Val Leu Asp Asp Ile Asp
 20 25 30
 Phe Asp Phe Gly Glu Ser Gln Ile Val Gly Leu Ile Gly Lys Asn Gly
 35 40 45
 Val Gly Lys Thr Thr Leu Met Lys Val Met Asn Asn Asn Ile Ile Asn

50		55		60											
Tyr	Gln	Gly	Lys	Val	Asp	Met	Pro	Lys	Ser	Glu	Asn	Val	Gly	Tyr	Leu
65					70					75					80
Ile	Glu	His	Pro	Lys	Leu	Tyr	Gly	Asn	Lys	Thr	Gly	Leu	Phe	Asn	Leu
				85						90				95	
Lys	Leu	Phe	Ala	Gln	Val	Leu	Gly	Asp	Gly	Phe	Asp	Lys	Glu	Tyr	Ala
			100					105					110		
Asn	His	Ile	Ile	Glu	Ala	Phe	Gly	Met	Lys	Pro	Tyr	Ile	Lys	Lys	Lys
		115					120					125			
Val	Asn	Lys	Tyr	Ser	Met	Gly	Met	Lys	Gln	Lys	Leu	Ser	Ile	Ala	Val
	130					135					140				
Ser	Leu	Met	Asn	Lys	Pro	Lys	Tyr	Leu	Ile	Leu	Asp	Glu	Pro	Thr	Asn
145					150					155					160
Gly	Met	Asp	Pro	Asp	Gly	Ser	Ile	Asp	Val	Leu	Lys	Thr	Ile	Gln	Ser
				165					170					175	
Leu	Val	Gln	Gln	Leu	Glu	Met	Lys	Ile	Leu	Ile	Ser	Ser	His	Lys	Leu
			180					185					190		
Glu	Asp	Ile	Glu	Leu	Ile	Cys	Asp	Arg	Ala	Val	Phe	Pro			
	195						200					205			

<210> 6293

<211> 178

<212> PRT

<213> S.epidermidis

<400> 6293

His	Leu	Gly	Val	Glu	Gln	Arg	Tyr	Ala	Val	Ile	Gln	Leu	Lys	Thr	Lys
1			5						10					15	
Tyr	Asn	Ala	Thr	Phe	Leu	Lys	Ser	Glu	Phe	Asp	Lys	Trp	Glu	Gln	His
			20					25					30		
Ile	Glu	Asp	Met	Tyr	Ala	Leu	His	Tyr	Pro	Arg	Met	Phe	Ile	Asp	Pro
	35						40					45			
Tyr	Thr	Met	Gln	Leu	Ser	Tyr	Glu	Ser	Asn	His	Ile	Glu	Asp	Leu	Ala
	50					55					60				
Leu	Ser	Ile	Ile	Glu	Glu	Arg	Glu	Lys	Leu	Glu	Lys	Phe	Lys	His	Lys
65				70					75					80	
Ser	Asn	His	Asp	Leu	Lys	Lys	Phe	Asn	Ile	Ile	Leu	Ser	Asn	Tyr	Ser
			85					90					95		
Asp	Ser	Glu	Gln	Arg	Gln	Ile	Lys	Arg	Tyr	Gln	Arg	Asp	Asp	Ile	Leu
			100				105					110			
Ala	Asp	Glu	Ser	Leu	Ile	Leu	Arg	Ile	Cys	Glu	Asp	Ile	Ser	Asn	Ile
	115						120					125			
Asp	Ser	Lys	Asp	Lys	Asn	Asn	Arg	Asn	Thr	Ala	Ile	Gln	Glu	Glu	Ile
	130				135						140				
Lys	Ala	Asp	Lys	Glu	Arg	Arg	Arg	Ala	Glu	Gly	Lys	Ala	Arg	Lys	Glu
145				150					155						160
Arg	Ile	Lys	Ala	Arg	Met	Lys	Arg	Ala	Arg	Gln	Glu	Lys	Leu	Leu	Gln
			165					170						175	

Ala Asn

<210> 6294

<211> 110

<212> PRT

<213> S.epidermidis

<400> 6294

Lys Lys Ala Val Tyr Leu Met Asn Lys Lys Lys Met Ser Glu Met Ser
 1 5 10 15
 Glu Gln Glu Leu Arg His Glu Ile Gln Leu Phe Lys Glu Lys Met Arg
 20 25 30
 Lys Ala Glu Met Asn Gly Ile Met Asn Glu Tyr Asp Val Tyr Gln Ser
 35 40 45
 Lys Val Ile Ile Ala Glu Ser Tyr Leu Val Asp Arg Asn Lys Ile Glu
 50 55 60
 Pro Gly Lys Ile Tyr Lys Leu Asn Asp Gly Ser Lys Gln Tyr Phe Lys
 65 70 75 80
 Val Glu Arg Leu Lys Gly Val Phe Ala Trp Gly Phe Arg Ile Asn Ser
 85 90 95
 Ser Glu Pro Glu Glu Gly Leu Pro Leu Ala Leu Leu Lys Phe
 100 105 110

<210> 6295

<211> 124

<212> PRT

<213> S.epidermidis

<400> 6295

Gly Tyr Gln Val Phe Phe Arg Tyr Val Asn Pro Tyr Leu Asn Leu Tyr
 1 5 10 15
 Gln Ser Leu Asn His Tyr Leu Asn Leu Asn His Cys Leu Asn Leu Asn
 20 25 30
 His Tyr Leu Asn Leu Asn His Tyr Leu Ser Leu Asn His Cys Leu Asn
 35 40 45
 Leu Ser His Tyr Leu Ser Leu Asn His Cys Leu Asn Leu Ser His Tyr
 50 55 60
 Leu Asn Leu Ser His Tyr Leu Asn Leu Ser His Cys Leu Asn Leu Asn
 65 70 75 80
 His Tyr Leu Asn Leu Asn His Tyr Leu Asn Leu Ser His Tyr Leu Ser
 85 90 95
 Leu Asn His Tyr Leu Asn Met Cys His Phe Leu Ser His Tyr Leu Lys
 100 105 110
 Arg Tyr Leu Tyr Leu Asn His Tyr Pro Asn Ser Tyr
 115 120

<210> 6296

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6296

Tyr Lys Leu Phe Asp Pro Leu Ile Tyr Gln Asp Arg Val Glu Phe Leu
 1 5 10 15
 Ile Ser Met Trp Gln Lys Leu Met Val Tyr Leu Phe Arg Leu Gln Ser
 20 25 30
 Asn Leu Tyr Ser Ile Ser Phe Leu Leu Thr Asn
 35 40

<210> 6297

<211> 155

<212> PRT

<213> S.epidermidis

<400> 6297

Glu Gly Leu Phe Val Phe Pro Leu Gly Leu Pro Gly Phe Phe Pro Val
 1 5 10 15
 Cys Glu Pro Leu Pro Glu Leu Val Pro Glu Ser Glu Ser Leu Ser Glu
 20 25 30
 Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu
 35 40 45
 Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu
 50 55 60
 Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu
 65 70 75 80
 Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu
 85 90 95
 Ser Glu Ser Lys Ser Leu Ser Glu Ser Glu Ser Leu Ser Lys Tyr Val
 100 105 110
 Ser Phe Ser Glu Ser Leu Phe Glu Thr Ile Ser Val Ser Lys Ser Leu
 115 120 125
 Ser Glu Phe Ile Leu Ile Pro Val Arg Leu Val Ser Phe Thr Arg Leu
 130 135 140
 Ile Ile Leu Leu Leu Ala Val Phe Leu Ser Ile
 145 150 155

<210> 6298

<211> 46

<212> PRT

<213> S.epidermidis

<400> 6298

Val Ile Ile Leu Tyr Asp Thr His Leu Phe Gly Arg Cys Ser Ile Met
 1 5 10 15
 Thr Trp Trp Gln Asp Gly Ile Ile Thr Leu Ile Thr Gly Gly Ile Leu
 20 25 30
 Ile Val Phe Arg Ile Trp Leu Glu Ile Lys Trp Lys Gly Lys
 35 40 45

<210> 6299

<211> 315

<212> PRT

<213> S.epidermidis

<400> 6299

Leu Lys Ile Leu Asn Lys Lys Arg Leu Ile Asp Met Lys Phe Thr Glu
 1 5 10 15
 Ser Glu Arg Leu Gln Gln Leu Ser Asn Glu Tyr Ile Leu Gly Gly Val
 20 25 30
 Asn Ser Pro Ser Arg Ser Tyr Lys Ala Val Gly Gly Gly Ala Pro Val
 35 40 45
 Val Met Lys Glu Gly His Gly Ala Tyr Leu Tyr Asp Val Asp Gly Asn
 50 55 60
 Lys Tyr Ile Asp Tyr Leu Gln Ala Tyr Gly Pro Ile Ile Thr Gly His
 65 70 75 80
 Ala His Pro His Ile Thr Glu Ala Ile Gln Asp Gln Ala Ala Lys Gly
 85 90 95
 Val Leu Tyr Gly Thr Pro Thr Glu Leu Glu Ile Asn Phe Ser Lys Lys
 100 105 110

<210> 6302
 <211> 473
 <212> PRT
 <213> S.epidermidis

<400> 6302

Lys	Lys	Lys	Leu	Ala	Phe	Tyr	Ile	Leu	Gly	Cys	Met	Arg	Ile	Phe	Lys
1			5						10					15	
Ile	Met	Asp	Asn	Lys	Ile	Glu	Lys	Ile	Leu	Glu	Asp	Ile	Asn	Lys	Leu
		20					25						30		
Gln	Gly	Tyr	Lys	Val	Thr	Tyr	Gln	Tyr	Ala	Thr	Ala	Ile	Asn	Ile	Lys
		35					40					45			
Asp	Asn	Asn	Met	Asn	Pro	Trp	Phe	Glu	Lys	Ile	Glu	Glu	Ile	Leu	Leu
		50				55					60				
Asn	Val	Lys	Gly	Val	Ile	Arg	Ile	Leu	Ser	Pro	Asp	Asn	Pro	Pro	Val
65				70						75				80	
Asn	Tyr	Asp	Tyr	Trp	Ile	Leu	Pro	Gly	Arg	Tyr	Lys	Arg	His	Thr	Lys
			85						90				95		
Glu	Tyr	His	Glu	Lys	Leu	Glu	Lys	Phe	Leu	Glu	Lys	Phe	Ala	Thr	Asn
			100					105					110		
Ala	Asn	Ile	Asn	Asp	Gly	Leu	Phe	Asp	Gln	Asn	Asn	Ile	His	Gly	Tyr
		115					120					125			
Lys	Tyr	Lys	Lys	Tyr	Ile	Phe	Thr	Pro	His	Ile	Glu	Ile	Thr	His	Glu
	130					135					140				
Asn	Thr	Leu	Asn	Leu	Phe	Phe	Leu	Thr	Leu	Thr	Ile	Phe	Asn	Asn	Gly
145				150						155					160
Thr	Phe	Val	Ile	Glu	Ile	Ile	Glu	Asp	Leu	Glu	Ser	Ile	Asn	Phe	Gly
			165						170					175	
Ser	Asp	Leu	Tyr	Ser	Thr	Phe	Ser	Cys	Val	Lys	Asp	Lys	Ile	Tyr	Pro
		180						185					190		
Leu	Ile	Asn	Gln	Glu	Lys	Asn	Asn	Arg	Gln	Arg	Gln	Tyr	Gln	Phe	Tyr
		195					200					205			
Gly	Asn	Arg	His	Cys	Lys	Asn	Ile	Arg	Asp	Val	Ser	Arg	Gln	Ile	Asn
	210					215					220				
Arg	Ile	Ile	Lys	Ile	Asn	Ser	Lys	Asp	Ile	Phe	Glu	Tyr	Lys	Val	Ser
225				230						235				240	
Lys	Asn	Met	Gly	Phe	Glu	Val	Tyr	Tyr	Leu	Ala	Asn	Glu	Asn	Glu	Phe
			245						250					255	
Thr	Asp	Asp	Pro	Phe	Tyr	Glu	Asp	Val	Lys	Ile	Gln	Glu	Trp	Leu	Val
		260						265					270		
Asn	Ala	Pro	Ile	Phe	Ser	Phe	Glu	Gly	Lys	Ser	Lys	His	Phe	Arg	Gln
		275					280					285			
Asp	Gly	Tyr	Ser	Asp	Asn	Tyr	Ile	Asn	Phe	Leu	Asn	Lys	Ala	Ser	Val
	290					295					300				
Phe	Val	Val	Trp	Met	Asp	Glu	Gln	Glu	Glu	Asp	Val	Leu	Glu	Lys	Cys
305				310						315					320
Ser	Gln	Met	Ala	Leu	Tyr	Phe	Asn	Ser	Ser	Ala	Asn	Phe	Phe	Phe	Leu
			325						330					335	
Glu	Thr	Met	Leu	Asn	Glu	Leu	Gln	Leu	Tyr	Gly	Tyr	Gln	Gln	Tyr	Asn
		340						345					350		
Leu	Asn	Gly	Lys	Lys	Glu	Ala	Leu	Tyr	Phe	Arg	Gln	Trp	Ile	Leu	Asn
		355					360					365			
Phe	Lys	Arg	Ser	Ile	Ala	Ile	Ile	Tyr	Arg	Thr	Glu	Leu	Leu	Pro	Ser
	370					375					380				
Leu	Tyr	Leu	Tyr	Leu	Tyr	Leu	Lys	Asn	Asn	Asn	Asp	Phe	Lys	Ser	Pro

Val Phe Asn Glu Glu Leu Leu Glu Asn Asp Thr Ile Thr Asp Ile Thr
 305 310 315 320
 Pro Asp Lys Gln

<210> 6304
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6304
 Ala Phe Pro Ser Lys Thr Leu Lys Lys Met Trp Lys Val Gly Cys Val
 1 5 10 15
 Glu Met Lys Lys Gln Cys Leu Leu Tyr Leu Tyr Val Ala Pro Leu Asp
 20 25 30
 Ile His Leu Gly Asn Val Asn Val His
 35 40

<210> 6305
 <211> 78
 <212> PRT
 <213> S.epidermidis

<400> 6305
 Gly Gly Ile Ser Met Val His Glu Leu Gly Thr Val Gly Met Val Cys
 1 5 10 15
 Pro Phe Pro Leu Ile Glu Ala Gln Lys Lys Met Asn Gln Leu Asn Gln
 20 25 30
 Gly Asp Glu Leu Lys Ile Asp Phe Asp Cys Thr Gln Ala Thr Glu Ala
 35 40 45
 Leu Pro Asn Trp Ala Ala Glu Asn Gly Tyr Pro Val Thr Asn Tyr Glu
 50 55 60
 Gln Leu Asp Asp Ala Ser Trp Thr Ile Thr Ile Gln Lys Ala
 65 70 75

<210> 6306
 <211> 99
 <212> PRT
 <213> S.epidermidis

<400> 6306
 Gly Ser Ile Pro Pro Thr Pro Pro Arg Lys Leu Ala Leu Thr Phe Gln
 1 5 10 15
 Arg Leu Leu Pro Ile Leu Tyr Lys Leu Cys Arg Ile Ser Ile Ser Gly
 20 25 30
 Tyr Ser Lys Ala Pro Arg Gly Leu Ser Val Leu Ser Arg Val Thr Cys
 35 40 45
 Ile Phe Thr Gly Thr Met Ile Ser Pro Ser Leu Ser Leu Arg Gln Cys
 50 55 60
 Pro Asn Arg Tyr Ala Phe Arg Ala Gly Arg Asn Leu Pro Asp Lys Glu
 65 70 75 80
 Phe Arg Tyr Leu Arg Thr Val Ile Val Thr Ala Ala Val Tyr Trp Gly
 85 90 95
 Phe Asp Ser

<210> 6307
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 6307
 Arg Tyr Cys Thr Ser Pro Cys Leu Leu Val Asn Phe Ser Cys His Ile
 1 5 10 15
 Leu Ser Leu Leu Asn Lys Lys Gly Arg Ser Ala Thr His Tyr Ile Ile
 20 25 30
 Arg Tyr Leu Ile His Tyr Ile Arg Leu Leu Ile Cys Tyr Asn His
 35 40 45

<210> 6308
 <211> 154
 <212> PRT
 <213> S.epidermidis

<400> 6308
 Lys Leu Ile Thr Ile His Asn Leu Asn Glu Met Asp Lys Phe Ala Gln
 1 5 10 15
 Ile Leu Val Lys His Leu Ser Ala Lys Asp Leu Ile Leu Leu Asn Gly
 20 25 30
 Asp Leu Gly Ala Gly Lys Thr Thr Leu Thr Gln Phe Ile Gly Lys Ala
 35 40 45
 Leu Gly Val Lys Arg Thr Ile Asn Ser Pro Thr Phe Asn Ile Ile Lys
 50 55 60
 Ser Tyr Lys Gly Ser Ser Ile Arg Leu His His Met Asp Cys Tyr Arg
 65 70 75 80
 Leu Glu Gly Glu Glu Asp Asp Leu Gly Phe Asp Glu Tyr Phe Glu Asp
 85 90 95
 Asn Ala Ile Ile Val Ile Glu Trp Ser Lys Phe Ile Lys Asp Phe Leu
 100 105 110
 Pro Pro Asn His Leu Thr Ile Asn Ile Ser Val Lys Asn Ala Asn Glu
 115 120 125
 Arg Gln Val Ser Ile Glu Thr His Gly Gln His Tyr Ala Leu Val Lys
 130 135 140
 Glu Ala Ile Leu Asn Glu Leu Ser Ser Asn
 145 150

<210> 6309
 <211> 82
 <212> PRT
 <213> S.epidermidis

<400> 6309
 Asn Gly Gly Leu Leu Met Glu Arg Thr Ile His Phe Thr Leu Val Asp
 1 5 10 15
 Gln Val Ser Thr Leu Asn Arg Ile Thr Ser Ala Phe Val Arg Leu Gln
 20 25 30
 Cys Asn Ile Asp Glu Leu His Val Lys His Ser Asp Lys Glu Gly Ile
 35 40 45
 Ser Asn Met Lys Leu Lys Val Asn Ile Lys Asp Asp Asp Thr Phe Lys
 50 55 60
 Ile Val Leu Lys Lys Leu Ser Gln Gln Val Asn Val Leu Ser Val Lys
 65 70 75 80

Ser Glu

<210> 6310

<211> 97

<212> PRT

<213> S.epidermidis

<400> 6310

Gly	Ser	Leu	Thr	Ala	Arg	Pro	Thr	Ser	Arg	Ala	Gly	Ser	Lys	Asp	Gly
1				5					10					15	
Leu	Ser	Asp	Pro	Val	Val	Pro	His	Gly	Arg	Ala	Ile	Ala	Gln	Arg	Ile
			20					25					30		
Lys	Ala	Thr	Pro	Gly	Ile	Thr	Gly	Leu	Ser	Pro	Pro	Arg	Val	His	Ile
		35					40					45			
Asp	Gly	Glu	Val	Trp	His	Leu	Asp	Val	Gly	Ser	Ser	His	Pro	Gly	Ala
	50					55					60				
Val	Val	Gly	Pro	Lys	Gly	Trp	Ala	Val	Arg	Pro	Leu	Lys	Arg	Tyr	Ala
65					70				75					80	
Ser	Trp	Val	Gln	Asn	Val	Val	Arg	Gln	Phe	Gly	Pro	Tyr	Pro	Ser	Trp
				85				90						95	

Ala

<210> 6311

<211> 424

<212> PRT

<213> S.epidermidis

<400> 6311

Lys	Thr	Val	Thr	Val	Arg	Thr	Lys	Val	Ser	Thr	Lys	Asp	Ile	Asp	Glu
1				5					10					15	
Ala	Tyr	Leu	Arg	Leu	Lys	Asn	Ile	Val	Lys	Glu	Thr	Pro	Leu	Gln	Phe
			20					25					30		
Asp	His	Tyr	Leu	Ser	Gln	Lys	Tyr	Asn	Cys	Asn	Val	Tyr	Leu	Lys	Arg
		35				40					45				
Glu	Asp	Leu	Gln	Trp	Val	Arg	Ser	Phe	Lys	Leu	Arg	Gly	Ala	Tyr	Asn
	50					55					60				
Ala	Ile	Ser	Val	Leu	Ser	Asn	Glu	Glu	Lys	Asn	Lys	Gly	Ile	Thr	Cys
65					70				75					80	
Ala	Ser	Ala	Gly	Asn	His	Ala	Gln	Gly	Val	Ala	Tyr	Thr	Ala	Lys	Lys
				85				90						95	
Leu	Asn	Leu	Lys	Ala	Val	Ile	Phe	Met	Pro	Val	Thr	Thr	Pro	Arg	Gln
			100					105					110		
Lys	Ile	Asn	Gln	Val	Lys	Phe	Phe	Gly	Asp	Ser	Asn	Val	Glu	Ile	Val
		115					120					125			
Leu	Ile	Gly	Asp	Thr	Phe	Asp	His	Cys	Leu	Ala	Gln	Ala	Leu	Asn	Tyr
		130				135					140				
Thr	Lys	Gln	His	Lys	Met	Asn	Phe	Ile	Asp	Pro	Phe	Asn	Asn	Val	Tyr
145					150				155					160	
Thr	Ile	Ala	Gly	Gln	Gly	Thr	Leu	Ala	Lys	Glu	Ile	Leu	Asn	Gln	Ala
				165					170					175	
Glu	Lys	Glu	Asp	Lys	Thr	Phe	Asp	Tyr	Val	Phe	Ala	Ala	Ile	Gly	Gly
			180				185						190		
Gly	Gly	Leu	Ile	Ser	Gly	Val	Ser	Thr	Tyr	Phe	Lys	Ala	His	Ser	Pro
		195					200								

His Thr Lys Ile Ile Gly Val Glu Pro Thr Gly Ala Ser Ser Met Tyr
 210 215 220
 Gln Ser Val Val Ile Asn His Ser Ile Val Thr Leu Glu Asn Ile Asp
 225 230 235 240
 Lys Phe Val Asp Gly Ala Ser Val Ala Arg Val Gly Asp Ile Thr Phe
 245 250 255
 Asp Ile Ala Lys Asp Lys Val Asp Asp Tyr Val Gln Val Asp Glu Gly
 260 265 270
 Ala Val Cys Ser Thr Ile Leu Asp Met Tyr Ser Lys Gln Ala Ile Val
 275 280 285
 Ala Glu Pro Ala Gly Ala Leu Ser Val Ser Ala Leu Glu Gln Tyr Lys
 290 295 300
 Lys Gln Ile Glu Asn Lys Thr Ile Val Cys Ile Val Ser Gly Gly Asn
 305 310 315 320
 Asn Asp Ile Asn Arg Met Lys Glu Ile Glu Glu Arg Ser Leu Leu Phe
 325 330 335
 Glu Glu Met Lys His Tyr Phe Ile Leu Asn Phe Pro Gln Arg Pro Gly
 340 345 350
 Ala Leu Arg Glu Phe Val Asn Asp Val Leu Gly Pro Gln Asp Asp Ile
 355 360 365
 Thr Lys Phe Glu Tyr Leu Lys Lys Thr Ser Gln Asn Thr Gly Thr Val
 370 375 380
 Ile Ile Gly Ile Gln Leu Lys His His Asp Asp Leu Ile Gln Leu Lys
 385 390 395 400
 Asp Arg Val Cys Gln Phe Asp Pro Ser Asn Ile Tyr Ile Asn Glu Asn
 405 410 415
 Lys Met Leu Tyr Ser Leu Leu Ile
 420

<210> 6312

<211> 46

<212> PRT

<213> S.epidermidis

<400> 6312

Ile Asn Tyr Phe Ile Asn Glu Tyr Arg Lys Gln Leu Lys Ile Glu Asn
 1 5 10 15
 Lys Leu Ser Ile Gly Asn Val Arg Thr Tyr Gln Gln Asn Val Ser Lys
 20 25 30
 Leu Trp Val Ser Ser Glu Val Val Cys Gly Tyr Val Asn Lys
 35 40 45

<210> 6313

<211> 173

<212> PRT

<213> S.epidermidis

<400> 6313

Met Asp Phe Leu Gln Gln Asn Trp Thr Asn Ile Leu Lys Ile Ile Val
 1 5 10 15
 Ser Leu Ile Ser Ile Val Thr Phe Ile Arg Val Phe Leu Tyr Glu Arg
 20 25 30
 Ser Arg Leu Lys Val Asn Ile Ile Gly Tyr Asp Gln Ile Glu Glu Tyr
 35 40 45
 Leu Asp Val Tyr Ile Ser Phe Ser Asn Ser Ser Lys Leu Pro Ile Ser
 50 55 60

Ile Asn Glu Ile Gln Ile Phe His Lys Asn Thr Met Ile Gly Glu Ile
65 70 75 80
Glu Asn Phe Thr Glu Lys Ile Leu Gly Gln Thr Asp Gly Lys Ser Ile
85 90 95
Val Tyr Ser Asn Pro Met Pro Leu Asn Leu Asn Ser Tyr Ser Ser Asp
100 105 110
Lys Asp Leu Phe Arg Ile Lys Leu Val Glu Glu Leu Pro Leu Asn Lys
115 120 125
Thr Leu Thr Phe Lys Phe Ile Thr Thr Arg Lys Asn Ile Thr Tyr Lys
130 135 140
Ile Lys Asp Phe Lys Leu Pro Gln Tyr Arg Arg Ser Phe His Arg Lys
145 150 155 160
Leu Lys His His Lys Lys Val Ser Asn Lys Asn Lys Asp
165 170

<210> 6314
<211> 104
<212> PRT
<213> S.epidermidis

<400> 6314
Val Asp Ile Tyr Cys Asn Gly Arg Leu Lys Gln Met Thr Gln Glu Ile
1 5 10 15
Asn Cys Asn Phe Lys Ser His Ile Pro Arg Ile Met Thr Val Pro Gly
20 25 30
Ile Leu Leu Ile His Glu Asn Lys Leu Glu Phe Lys Ala Tyr Ser Gln
35 40 45
Asn Asn Asn Pro Phe Asn Ile Gln Phe Glu Leu Ser Ser Ile Val Arg
50 55 60
Tyr Arg Thr Ser Lys Gly Leu Leu Gly Asn Lys Leu Phe Ile Tyr Tyr
65 70 75 80
Ser Asp Gln Glu Trp Tyr Lys Phe Ser Asn Leu Ser Lys Ser Asp Leu
85 90 95
Asn Lys Leu Thr Lys Tyr Leu Tyr
100

<210> 6315
<211> 138
<212> PRT
<213> S.epidermidis

<400> 6315
Gly Val Thr Tyr Lys Met Lys Lys Ile Phe Ile Leu Leu Leu Ser Ser
1 5 10 15
Leu Leu Val Leu Ala Ala Cys Gly Lys Asn Tyr Glu Ile Ser Asp Ile
20 25 30
Thr Asn Lys Phe Lys Lys Glu Gly Leu Ser Val Glu Asn Leu Arg Lys
35 40 45
Met Lys Arg Glu Asp Phe Gly Met Ala Pro Met Lys Thr Glu Asn Ala
50 55 60
Lys Ile Phe Thr Val Ser Asp Asp Lys Asn Ala Arg Ile Leu Lys Phe
65 70 75 80
Lys Asn Glu Asp Asp Leu Lys Glu Met Lys Lys Tyr Tyr Glu Glu Leu
85 90 95
Gly Lys Ser Ser Ala Ala Phe Tyr Ser His Val Tyr Thr Lys Asp Arg
100 105 110

Phe Leu Ile Gln Met Asn Gly Asp Ile Asp Asp His Leu Phe Glu Lys
 115 120 125
 Tyr Lys Lys Ala Met Asn Glu Ala Leu Asp
 130 135

<210> 6316
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 6316
 Met Asn Tyr Leu Leu Ile Asp Thr Ser Asn Gln Pro Leu Ser Val Ala
 1 5 10 15
 Ile Met Lys Asp Asn Glu Val Ile Ala Glu Lys Thr Thr Asp Ile Lys
 20 25 30
 Lys Asn His Ser Val Gln Leu Met Pro Glu Ile Ala Glu Phe Leu Gln
 35 40 45
 Lys Val Lys
 50

<210> 6317
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 6317
 Asn Ser His Leu Asp Tyr Leu Cys Arg Phe Ala Val Arg Ala Pro Val
 1 5 10 15
 Ile Tyr Leu Glu Ala Phe Leu Gly Ser Val Lys Ser Thr Thr Arg Gly
 20 25 30
 Asn Asn Phe Leu Ser Pro Ser Gln Leu Ser Leu Met Ser Ala Gly Phe
 35 40 45
 Ala

<210> 6318
 <211> 622
 <212> PRT
 <213> S.epidermidis

<400> 6318
 Thr Tyr Gln Gln Leu Asn Lys Leu Leu Ser Phe Tyr Tyr Thr Arg Lys
 1 5 10 15
 Asp Ser Asn Phe Arg Lys Val Leu Thr Ser Lys Cys Leu Ser Pro Ile
 20 25 30
 Ser Ser Trp Met Gly Leu Asn Asn Val Pro Ile Phe Ile Gly Thr Phe
 35 40 45
 Phe Tyr Phe Leu Asn Asn Tyr Met Gly Glu Arg Tyr Met Arg Ser Asp
 50 55 60
 Met Ile Lys Lys Gly Asp His Gln Ala Pro Ala Arg Ser Leu Leu His
 65 70 75 80
 Ala Thr Gly Ala Phe Lys Gln Pro Thr Asp Met Asn Lys Pro Phe Val
 85 90 95
 Ala Ile Cys Asn Ser Tyr Ile Asp Ile Val Pro Gly His Val His Leu
 100 105 110
 Arg Glu Leu Ala Asp Ile Ala Lys Glu Ala Ile Arg Glu Ala Gly Ala

225 230 235 240
 Asn His Ser Lys Ser Asn His Leu Leu Thr Glu Phe Val Thr Arg His
 245 250 255
 Gln Ile Pro Thr Val Thr Thr Leu Leu Gly Leu Gly Ala Val Pro Tyr
 260 265 270
 His His Pro Leu Phe Leu Gly Met Gly Gly Met His Gly Ser Tyr Ala
 275 280 285
 Ser Asn Met Ala Leu Thr Asn Cys Asp Leu Leu Ile Asn Leu Gly Ser
 290 295 300
 Arg Phe Asp Asp Arg Leu Ala Ser Lys Pro Asp Ala Phe Ala Pro Asn
 305 310 315 320
 Ala Lys Val Val His Val Asp Ile Asp Pro Ser Glu Ile Asn Lys Val
 325 330 335
 Ile Asn Thr Asp Leu Gly Ile Val Ala Asp Cys Lys His Val Leu Glu
 340 345 350
 Asn Leu Cys His Glu Gln Val Leu Thr Ser Ser His Glu Glu Trp Asn
 355 360 365
 Asp Tyr Cys Ile Asn Asn Lys Ser Asn Tyr Pro Phe Lys Tyr Asp Glu
 370 375 380
 Asn Asp Lys Thr Phe Cys Lys Pro Gln Lys Ala Ile Glu Tyr Ile Gly
 385 390 395 400
 Lys Val Thr Asn Gly Asn Ala Ile Val Thr Thr Asp Val Gly Gln His
 405 410 415
 Gln Met Trp Thr Ala Gln Phe Tyr Pro Phe Lys Asn Tyr Gly Gln Trp
 420 425 430
 Val Thr Ser Gly Gly Leu Gly Thr Met Gly Phe Gly Ile Pro Ser Ala
 435 440 445
 Ile Gly Ala Gln Leu Ala Glu Pro Glu Lys Thr Val Val Cys Phe Val
 450 455 460
 Gly Asp Gly Gly Phe Gln Met Thr Asn Gln Glu Met Ala Leu Leu Pro
 465 470 475 480
 Glu Tyr Gly Leu Asn Val Lys Ile Val Leu Ile Asn Asn Gly Thr Leu
 485 490 495
 Gly Met Val Lys Gln Trp Gln Asp Lys Phe Phe Asn Lys Arg Phe Ser
 500 505 510
 His Ser Val Phe Asn Asp Gln Pro Asp Phe Met Lys Met Ala Glu Ala
 515 520 525
 Tyr Gly Ile Lys Gly Phe Leu Ile Asp Ser Pro Asp Lys Leu Glu Ser
 530 535 540
 Ser Ile Asp Glu Ala Phe Ala Tyr His Gly Pro Ala Leu Ile Glu Val
 545 550 555 560
 Arg Ile Ser Pro Ile Glu Pro Val Asn Pro Met Val Pro Ser Gly Lys
 565 570 575
 Ser Asn His Glu Met Glu Gly Tyr
 580

<210> 6321

<211> 189

<212> PRT

<213> S.epidermidis

<400> 6321

Leu Glu Ile Lys Pro Ile Thr Ile Tyr Thr Gly Lys Thr Val Pro Leu
 1 5 10 15
 Phe Tyr Asp Asn Ile Asp Thr Asp Gln Ile Ile Pro Lys Val His Leu
 20 25 30

Lys Arg Val Ser Lys Ser Gly Phe Gly Pro Phe Ala Phe Asp Glu Trp
 35 40 45
 Arg Tyr Leu Pro Asp Gly Ser Asp Asn Pro Asp Phe Asn Pro Asn Lys
 50 55 60
 Pro Glu Tyr His Gly Ala Ser Ile Leu Ile Thr Gly Asp Asn Phe Gly
 65 70 75 80
 Cys Gly Ser Ser Arg Glu His Ala Ala Trp Ala Leu Lys Asp Tyr Gly
 85 90 95
 Phe Asn Ile Ile Ile Ala Gly Ser Phe Ser Asp Ile Phe Tyr Met Asn
 100 105 110
 Cys Thr Lys Asn Ala Met Leu Pro Ile Cys Leu Asn Gln Lys Glu Arg
 115 120 125
 Glu His Leu Ala Gln Phe Asp Glu Ile Thr Val Asp Leu Pro Asn Gln
 130 135 140
 Thr Val Ser Thr Val Ser Gln Ser Phe His Phe Asp Ile Asp Glu Thr
 145 150 155 160
 Trp Lys Asn Lys Leu Ile His Gly Leu Asp Asp Ile Ala Ile Thr Leu
 165 170 175
 Gln Phe Glu Asn Leu Ile Glu Lys Tyr Glu Lys Thr Phe
 180 185

<210> 6322
 <211> 372
 <212> PRT
 <213> S.epidermidis

<400> 6322
 Glu Phe Ala Lys Tyr Gly Pro Phe Tyr Tyr Asn Thr Leu Val Phe Ile
 1 5 10 15
 Ser Glu Lys Gly Asp Lys Met Val Trp Thr Ile Ile Ser Gly Leu Val
 20 25 30
 Val Gly Ile Leu Leu Gly Phe Val Met Gln Arg Thr Arg Phe Cys Leu
 35 40 45
 Ala Gly Gly Phe Arg Asp Met Tyr Val Gln Lys Ser Asn Lys Met Phe
 50 55 60
 Tyr Ala Leu Leu Ile Ala Ile Thr Val Gln Ser Ile Gly Leu Leu Ile
 65 70 75 80
 Leu Lys His Leu Asn Ile Ile Glu Val Pro Ala Glu Thr Phe Pro Val
 85 90 95
 Ile Gly Thr Ile Leu Gly Ser Phe Ile Phe Gly Ile Gly Ile Val Leu
 100 105 110
 Ala Gly Gly Cys Ala Thr Gly Thr Trp Tyr Arg Ala Gly Glu Gly Leu
 115 120 125
 Ile Gly Ser Trp Val Ala Leu Ile Phe Tyr Ala Leu Thr Ser Ala Val
 130 135 140
 Thr Lys Thr Gly Val Leu Leu Pro Ile Met Asn Gln Ile Asn Lys Thr
 145 150 155 160
 Thr Gln Val Asn Thr Ser Met Thr Ser Thr Thr Gly Ile Pro Gln Trp
 165 170 175
 Ile Leu Val Met Leu Leu Ile Leu Ile Thr Val Phe Leu Val Val Lys
 180 185 190
 Thr Ile Arg Lys Pro Lys Ile Met Val Pro Gln Leu Lys Gln Lys Tyr
 195 200 205
 Ser Gly Ile Arg His Tyr Leu Phe Glu Lys Arg Tyr His Pro Phe Val
 210 215 220
 Ala Gly Ile Ala Val Gly Phe Ile Ala Leu Leu Ala Trp Pro Met Ser

Ala Thr Asp Thr Ile Ala Phe Ala Ile His Lys Tyr Cys Ser Asp His
 245 250 255
 Gln Gln Arg Phe Tyr Asn Cys Ser Ile Tyr Gly Phe Gly Gly Asp Pro
 260 265 270
 Met Thr Gln Ile Val Ser Pro Val Ile Gln Thr Val Ser Tyr Asn Tyr
 275 280 285
 Phe Glu Ala Gly Glu Gln Ala Leu Lys Glu Ile Asn Gln Leu Leu Lys
 290 295 300
 Gly Glu Gln Thr Ala Leu Lys Ile Lys Ile Pro Ile Gln Leu Asn
 305 310 315

<210> 6324

<211> 69

<212> PRT

<213> S.epidermidis

<400> 6324

Lys Leu Met Asn Lys Val Leu Gly Tyr Arg Lys Met Leu Gly Lys Thr
 1 5 10 15
 Gln Gln Gln Met Ala Lys Glu Leu Asn Ile Ser Glu Gln Ser Tyr Arg
 20 25 30
 Asn Arg Glu Lys Gly Lys Ile Asn Phe Lys Lys Asn Glu Met Ile Lys
 35 40 45
 Phe Lys Ile Met Leu Leu Glu Lys Gly Leu Lys Asp Ile Thr Leu Asp
 50 55 60
 Asp Ile Phe Phe Ser
 65

<210> 6325

<211> 649

<212> PRT

<213> S.epidermidis

<400> 6325

Lys Gly Glu Asn Arg Met Ile Leu Leu Gln Leu Asn Asp Ile Ser Lys
 1 5 10 15
 Ser Phe Asp Gly Glu Asp Ile Phe Thr Asp Val Asn Phe Glu Val Lys
 20 25 30
 Thr Gly Glu Arg Ile Gly Val Val Gly Arg Asn Gly Ala Gly Lys Ser
 35 40 45
 Thr Leu Met Lys Ile Ile Ala Gly Val Glu Asn Tyr Asp Ser Gly His
 50 55 60
 Ile Ser Lys Ile Lys Asn Leu Thr Met Ser Tyr Leu Thr Gln Gln Met
 65 70 75 80
 Thr Leu Asn Ser Glu Ala Thr Val Phe Glu Glu Met Ser Lys Pro Phe
 85 90 95
 Glu His Ile Lys Lys Ile Glu Asn Leu Ile Lys Asp Glu Thr Asp Trp
 100 105 110
 Leu Ala Arg Asn Gly Gln Asp Tyr Lys Ser Asp Glu Tyr Gln Ser His
 115 120 125
 Ile Glu Lys Tyr Glu Thr Leu Thr Asn Arg Tyr Glu Gln Leu Asp Gly
 130 135 140
 Tyr Gln Tyr Glu Ser Lys Ile Lys Thr Val Leu His Gly Leu Asn Phe
 145 150 155 160
 Thr Glu Ser Asp Phe Asn Lys Pro Ile Asn Asp Phe Ser Gly Gly Gln
 165 170 175

Lys Thr Arg Leu Ser Leu Ala Gln Met Leu Leu Lys Glu Pro Asp Leu
 180 185 190
 Leu Leu Leu Asp Glu Pro Thr Asn His Leu Asp Met Glu Thr Thr Lys
 195 200 205
 Trp Leu Glu Asp Tyr Leu Lys Tyr Phe Lys Gly Ala Ile Val Ile Ile
 210 215 220
 Ser His Asp Arg Tyr Phe Leu Asp Lys Ile Val Thr Gln Val Tyr Asp
 225 230 235 240
 Val Ala Leu Gly Asn Val Lys His Tyr Val Gly Asn Tyr Glu Gln Phe
 245 250 255
 Ile Lys Gln Arg Asn Gln Tyr Tyr Glu Lys Arg Met Gln Glu Phe Glu
 260 265 270
 Lys Gln Gln Glu Glu Ile Lys Arg Leu Glu Thr Phe Val Glu Lys Asn
 275 280 285
 Ile Thr Arg Ala Ser Thr Ser Gly Met Ala Lys Ser Arg Arg Lys Thr
 290 295 300
 Leu Glu Lys Met Glu Arg Ile Asp Lys Pro Met Ile Asp Ala Arg Ser
 305 310 315 320
 Ala Asn Ile Gln Phe Gly Phe Asp Arg Asn Thr Gly Asn Asp Val Met
 325 330 335
 His Ile His Asp Leu Lys Ile Gly Tyr Asp Ser Pro Ile Thr Leu Pro
 340 345 350
 Ile Asn Leu Glu Val Phe Lys Gly Asp His Ile Ala Ile Ile Gly Pro
 355 360 365
 Asn Gly Val Gly Lys Thr Thr Leu Ile Lys Thr Ile Ala Glu Lys Gln
 370 375 380
 Asn Lys Leu Gly Gly Gln Ile Ile Phe Gly Ala Asn Leu Gln Ile Gly
 385 390 395 400
 Tyr Tyr Asp Gln Lys Gln Ala Glu Phe Lys Ser Asn Lys Thr Ile Leu
 405 410 415
 Asp Tyr Val Trp Asp Gln Tyr Pro His Met Asn Glu Lys Asp Val Arg
 420 425 430
 Ala Val Leu Gly Arg Phe Leu Phe Val Gln Glu Asp Val Lys Lys Ile
 435 440 445
 Ile Asn Asp Leu Ser Gly Gly Glu Lys Ala Arg Leu Gln Leu Ala Leu
 450 455 460
 Leu Met Leu Gln Arg Asp Asn Val Leu Ile Leu Asp Glu Pro Thr Asn
 465 470 475 480
 His Leu Asp Ile Asp Ser Lys Glu Met Leu Glu Gln Ala Leu Lys Asp
 485 490 495
 Phe Glu Gly Thr Ile Ile Phe Val Ser His Asp Arg Tyr Phe Ile Asn
 500 505 510
 Gln Leu Ala Asn Lys Val Phe Asp Leu Asn Ile Asn Gly Gly Gln Met
 515 520 525
 Phe Leu Gly Asp Tyr Gln Tyr Tyr Ile Glu Lys Thr Glu Glu Ala Ala
 530 535 540
 Ala Ile Lys Ala His Glu Thr Val Thr Gln Asn Phe Glu Asn Lys
 545 550 555 560
 Glu Ile Asn Gln Asp Ala Asn Thr Ser Thr Tyr Ile Ser Gln Lys Gln
 565 570 575
 Gln Lys Arg Gln Gln Arg Lys Leu Glu Arg Gln Ile Glu His Cys Glu
 580 585 590
 Arg Gln Ile Glu Glu Leu Glu Ala Gln Ile Ser His Ile Glu Glu Gln
 595 600 605
 Leu Thr Gln Pro Glu Val Phe Asn Asp Pro Leu Lys Ala Ser Lys Phe
 610 615 620

Ala Asn Gln Lys Ser Asp Ile Glu Gln Lys Leu Glu Gln Ile Met Leu
 625 630 635 640
 Glu Trp Glu Lys Leu Gln Glu Lys Leu
 645

<210> 6326

<211> 461

<212> PRT

<213> S.epidermidis

<400> 6326

Glu Glu Glu Lys Ile Met Gly Gln Thr Leu Phe Asp Lys Val Trp Lys
 1 5 10 15
 Lys His Val Leu His Gly Lys Glu Gly Glu Pro Gln Leu Leu Tyr Ile
 20 25 30
 Asp Leu His Leu Ile His Glu Val Thr Ser Pro Gln Ala Phe Glu Gly
 35 40 45
 Leu Arg Ile Gln Asn Arg Lys Leu Arg Arg Pro Asp Leu Thr Phe Ala
 50 55 60
 Thr Leu Asp His Asn Val Pro Thr Ile Asp Ile Phe Asn Ile Lys Asp
 65 70 75 80
 Glu Ile Ala His Lys Gln Ile Thr Thr Leu Gln Gln Asn Ala Lys Asp
 85 90 95
 Phe Gly Val His Ile Phe Asp Met Gly Ser Asp Glu Gln Gly Ile Val
 100 105 110
 His Met Val Gly Pro Glu Thr Gly Leu Thr Gln Pro Gly Lys Thr Ile
 115 120 125
 Val Cys Gly Asp Ser His Thr Ala Thr His Gly Ala Phe Gly Ala Ile
 130 135 140
 Ala Phe Gly Ile Gly Thr Ser Glu Val Glu His Val Phe Ala Thr Gln
 145 150 155 160
 Thr Leu Trp Gln Thr Lys Pro Lys Asn Leu Lys Ile Asn Ile Asn Gly
 165 170 175
 Ser Leu Pro Thr Gly Val Tyr Ala Lys Asp Ile Ile Leu Tyr Leu Ile
 180 185 190
 Asn Gln Tyr Gly Val Asp Phe Gly Thr Gly Tyr Ala Leu Glu Phe Thr
 195 200 205
 Gly Glu Thr Ile Lys Asn Leu Ser Met Glu Ala Arg Met Thr Ile Cys
 210 215 220
 Asn Met Ala Ile Glu Ala Gly Ala Lys Tyr Gly Leu Met Gln Pro Asp
 225 230 235 240
 Glu Thr Thr Phe Asp Tyr Val Lys Gly Arg Pro Tyr Ala Thr Asp Phe
 245 250 255
 Asp Ser Ser Met Ala Trp Trp Lys Lys Leu Tyr Ser Asp Asp Ala
 260 265 270
 Tyr Phe Asp Lys Val Ile Glu Leu Asp Val Thr Asn Leu Glu Pro Gln
 275 280 285
 Val Thr Trp Gly Thr Asn Pro Glu Met Gly Val Ser Phe Ser Asn Pro
 290 295 300
 Phe Pro Glu Ile Lys Asn Ala Asn Asp Gln Arg Ala Tyr Asp Tyr Met
 305 310 315 320
 Gly Leu His Pro Gly Gln Lys Ala Glu Asp Ile Lys Leu Gly Tyr Val
 325 330 335
 Phe Leu Gly Ser Cys Thr Asn Ala Arg Leu Ser Asp Leu Ile Glu Ala
 340 345 350
 Ser His Ile Ile Lys Gly Gln Gln Val His Pro Asn Ile Thr Ala Ile

115	120	125
Asp Gln His Trp Asn Arg Ile Ser Ser Gln Met Ile Ala Arg Met Asn		
130	135	140
Lys Asp Gly Lys Ile Glu Lys Phe Pro Lys Pro Val Ile His Gly Gln		
145	150	155
Pro Glu Gly Tyr Thr Ser His Phe Arg Asp Pro Lys Val Phe Glu Lys		
	165	170
Asn Ser Gln Leu Tyr Ala Ile Leu Gly Ala Gln Asn Glu Asn Glu Met		
	180	185
Gly Arg Leu Leu Leu Tyr Arg Ser Gln Asp Val Val Asp Trp His Phe		
	195	200
Glu Gly Glu Ile Lys Thr Asn Leu Thr Gln Phe Gly Tyr Met Trp Glu		
	210	215
Cys Pro Asp Tyr Phe Arg Leu Ser Asn Lys Asp Val Ile Leu Met Cys		
225	230	235
Pro Gln Gly Val Glu Ala Glu Gly Asp Lys Phe Arg Asn Ile Tyr Gln		
	245	250
Ser Gly Tyr Met Ile Gly Asp Leu Asn Phe Asn Asn Leu Phe Phe Asp		
	260	265
His Glu Ser Phe Gln Glu Leu Asp Asn Gly Phe Asp Phe Tyr Ala Pro		
	275	280
Gln Thr Phe Val Asp Ala Asp Gly Gln Arg Ile Leu Ile Gly Trp Met		
	290	295
Gly Leu Pro Asp Thr Glu Tyr Pro Thr Asp Lys Glu Gly Trp Ala His		
305	310	315
Cys Leu Thr Ile Pro Arg Val Leu Thr Ile Glu Asn Gly Lys Leu Lys		
	325	330
Gln Arg Pro Phe Lys Gln Leu Glu Asp Leu Arg Thr Asn Lys Glu Thr		
	340	345
Ala Leu Gly Tyr Ala Asn Lys Phe Lys Arg Lys Leu His Pro Tyr Glu		
	355	360
Gly Lys Gln Tyr Glu Met Ile Ile Asp Ile Leu Glu Asn Asp Ala Ser		
	370	375
Glu Ile Tyr Phe Glu Leu Arg Ser Ser Arg Ser Glu Ser Thr Leu Ile		
385	390	395
Thr Tyr Asn Lys His Glu Asn Lys Leu Thr Leu Asp Arg Thr Asp Ser		
	405	410
Gly Thr Leu Pro Ser Asn Val Asp Gly Thr Thr Arg Ser Thr Ile Leu		
	420	425
Asp Ser Pro Leu Lys Gln Leu Gln Ile Phe Val Asp Thr Ser Ser Ile		
	435	440
Glu Ile Phe Cys Asn Asp Gly Glu Arg Val Leu Thr Ser Arg Ile Phe		
	450	455
Pro Asn Glu Asp Ala Thr Gly Ile Lys Ala Ser Thr Glu Ser Gly Gln		
465	470	475
Val Tyr Leu Lys Phe Thr Lys Tyr Glu Leu Lys Gly		
	485	490

<210> 6329

<211> 417

<212> PRT

<213> S.epidermidis

<400> 6329

Trp Val Ala Leu Leu Pro Phe Leu Phe Arg Arg Asp Lys Met Trp His
1 5 10 15

Glu Lys Phe Thr Asn Lys His Gly Asp Val Gln Tyr Arg Tyr Tyr Glu
 20 25 30
 Lys Tyr Lys Asp Pro Leu Thr Asn Lys Trp Arg Arg Val Ser Val Val
 35 40 45
 Leu Asn Lys Asn Gly Lys Gln Ser Gln Lys Glu Ala Gln Lys Leu Leu
 50 55 60
 Asn Lys Arg Ile Glu Ala Lys Ile Asn Asp Lys Thr Pro Ile Asp Leu
 65 70 75 80
 Lys Thr Leu Thr Phe His Gln Ala Cys Asp Glu Trp Leu Asp Arg Tyr
 85 90 95
 Ile Lys Thr Ser Gly Ser Lys Gln Ser Thr Ile Lys Thr Lys Lys Tyr
 100 105 110
 Lys Ile Lys His Ile Lys Arg Asn Ile Asn Ser Asp Ile Leu Val Lys
 115 120 125
 Asn Met Asn Ser Asp Val Val Gln Lys Ser Val Asp Asn Ala Val Lys
 130 135 140
 Asp Asn Leu Ser His Lys Val Val Lys Asp Ala Met Ser Ile Ile Arg
 145 150 155 160
 Asn Ile Met Lys Tyr Ile Gln Arg Lys Tyr Lys Leu Thr Asp Ile Ser
 165 170 175
 Tyr Leu Asp Asp Ile Val Ile Pro Lys Lys Ala Thr Thr Arg Glu Glu
 180 185 190
 Val Lys Ala Lys Arg Glu Asn Tyr Leu Glu Met Asp Glu Val Lys Ala
 195 200 205
 Ile Val Asp Asn Leu His Glu Ile Ala Asn Ser Lys Arg Ala Asp Tyr
 210 215 220
 Met Lys Arg Ser Phe Ile Met Thr Ala Tyr Ile Met Glu Phe Gln Ala
 225 230 235 240
 Leu Asn Gly Met Arg Ile Gly Glu Leu Leu Ala Ile Gln Pro Asn Asn
 245 250 255
 Ile Asp Phe Asp Lys Lys Thr Leu Glu Ile Asp Gly Thr Ile His Trp
 260 265 270
 Arg Asn Glu Gly Asn Ala Val Gly Phe Lys Asp Thr Thr Lys Thr Glu
 275 280 285
 Ser Ser Tyr Arg Thr Ile Ser Leu Thr Thr Arg Ser Cys Asp Ile Leu
 290 295 300
 Arg Lys Val Met Leu Glu Asn Lys Lys Ala Ile Gln Trp Glu Ser Met
 305 310 315 320
 Tyr Gln Asp Arg Gly Phe Ile Phe Thr Asn Tyr Arg Gly Asn Pro Met
 325 330 335
 Ser Leu Ser Thr Ile Asn Arg Asn Met Gln Gln Ser Ala Asn Asn Val
 340 345 350
 Gly Ile Thr Lys His Ile Thr Ser His Thr Met Arg His Ser His Ile
 355 360 365
 Ser Leu Leu Ser Gln Leu Gly Ile Ser Leu Lys Ala Ile Met Gln Arg
 370 375 380
 Val Gly His Thr Asp His Lys Thr Thr Leu Gln Ile Tyr Ser His Val
 385 390 395 400
 Thr Asp Gln Met Asp Lys Asp Met Met Asn Lys Leu Glu Lys Val Gly
 405 410 415
 Asn

<210> 6330

<211> 54

<212> PRT

<213> S.epidermidis

<400> 6330

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Lys Ala Phe Cys Asp Ala Lys Ser Tyr Leu Leu Ser Ser Phe Glu Cys
1          5          10          15
Ile Ile Ile His Leu Ser Gly Asp Asn Gly Lys Glu Val Thr Pro Val
          20          25          30
Pro Met Pro Asn Thr Glu Val Lys Leu Leu Ser Ala Asp Gly Ser Arg
          35          40          45
Thr Asp Val Pro Leu Glu
          50

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<210> 6331

<211> 58

<212> PRT

<213> S.epidermidis

<400> 6331

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Gln Leu Ile Phe Tyr Phe Gln Leu Phe Thr Ile Phe Ile Tyr Glu Ile
1          5          10          15
Ile Tyr Leu Glu Arg Lys Arg Arg Thr Lys Leu His Asp Glu Gln Ser
          20          25          30
Asn Leu Ser Thr Asn Tyr Ile Asn Phe His His Pro Asn Tyr Thr Cys
          35          40          45
Lys Cys Asn Tyr Leu Tyr Tyr Arg Glu Thr
          50          55

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<210> 6332

<211> 181

<212> PRT

<213> S.epidermidis

<400> 6332

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Arg Arg Ile Arg Met Lys Arg Leu Leu Gly Thr Leu Phe Ala Ala Thr
1          5          10          15
Leu Val Leu Ser Ala Cys Ser Gln Asp Asp Thr Lys Glu Asp Glu His
          20          25          30
Lys Lys Ser Glu Asn Thr Ala Glu Arg Lys Ala Asp Asp Lys Lys Asp
          35          40          45
Lys Lys Thr Lys Glu Asp Lys Lys Ser Lys Lys Glu Lys Lys Ser Gln
          50          55          60
Glu Asn Glu Asp Asn Lys Ser Thr Gln Glu Asp Asn Ser Thr Asp Asn
65          70          75          80
Gln Glu Thr Gln Asp Pro Ala Thr Gln Gly Gln Lys Gln Thr Gln Gln
          85          90          95
Asp Asn Gln Gln Asn Tyr Asp Asp Gln Gln Ser Tyr His Glu Pro Thr
          100          105          110
Lys Asp Glu Val Tyr Glu Trp Asp Lys Gln Asn Ile Pro Gly Gly Thr
          115          120          125
Asp Tyr Gly Leu Ile Asp Pro Glu Asp Val Asn Thr Glu Ser Glu Asp
          130          135          140
Asn Ala Arg Gln Asn Arg Ile Asp Glu Ile Asn Glu Glu Met Glu Asp
145          150          155          160
Pro Asn Ile Ser Val Ser Asp Tyr Asn Lys Leu Val Asp Glu Tyr Asn
          165          170          175
Glu Leu Asn Asn Glu

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180

<210> 6333
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6333
 Asp Phe Phe Ser Leu Lys Asp Asn Ile Ala Phe Lys Ile Ile Lys Val
 1 5 10 15
 Arg His Ile Asn Ile Pro Phe Glu Gly Ile Lys Lys Met Asn Ala Thr
 20 25 30
 Pro Ile Asn Gly Asn Asn Gly Gln Asn Ile Asn Lys Ile Phe Arg Leu
 35 40 45
 Val Gly Asn Ile
 50

<210> 6334
 <211> 68
 <212> PRT
 <213> S.epidermidis

<400> 6334
 Leu Cys Trp Leu Ser Asn Pro His His Leu Ser Trp Trp Glu Thr Val
 1 5 10 15
 Ser Gly Gly Gln Phe Asp Trp Gly Gly Arg Leu Leu Lys Gly Asn Gly
 20 25 30
 Gly Ala Gln Arg Phe Pro Gln Asn Gly Trp Lys Ser Phe Ile Glu Cys
 35 40 45
 Lys Gly Ile Arg Glu Leu Asp Cys Glu Thr Tyr Lys Ser Ser Arg Val
 50 55 60
 Glu Arg Arg Thr
 65

<210> 6335
 <211> 354
 <212> PRT
 <213> S.epidermidis

<400> 6335
 Val Glu Arg Arg Tyr Thr Tyr Met Ser Tyr Lys Ile Val Ala Leu Pro
 1 5 10 15
 Gly Asp Gly Ile Gly Pro Glu Ile Leu Ser Gly Thr Leu Glu Leu Leu
 20 25 30
 Lys Leu Ile Ser Glu Lys Tyr His Phe Glu Tyr His Leu Glu Ser His
 35 40 45
 His Phe Gly Gly Val Ser Ile Asp Tyr Tyr Gly Thr Pro Leu Thr Asn
 50 55 60
 Glu Thr Leu Gln Ser Cys Lys Asn Ala Asp Ala Ile Leu Leu Gly Ala
 65 70 75 80
 Ile Gly Gly Pro Lys Trp Thr Asp Pro Asn Asn Arg Pro Glu His Gly
 85 90 95
 Leu Leu Lys Leu Arg Lys Ser Leu Asn Leu Phe Ala Asn Ile Arg Arg
 100 105 110
 Thr Phe Val Thr Lys Gly Ala Ser His Leu Ser Pro Leu Lys Gln Asp
 115 120 125

6333 6334 6335

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Ile Val Glu Gly Thr Asp Leu Val Ile Val Arg Glu Leu Thr Ser Gly
130 135 140
Ile Tyr Phe Gly Glu Pro Ser Tyr Val Lys Lys Thr Glu Ala Leu Asp
145 150 155 160
Ser Leu Lys Tyr Ser Ser Gln Glu Ile Glu Arg Ile Val Arg Ile Ala
165 170 175
Phe Asn Leu Ala Asn Arg Arg Arg Lys Lys Leu Thr Ser Val Asp Lys
180 185 190
Glu Asn Val Leu Ser Ser Ser Lys Leu Trp Arg Gln Ile Val Asn Asp
195 200 205
Val Lys Lys Asp Tyr Pro Glu Val Glu Val Asn His Met Leu Val Asp
210 215 220
Ala Cys Ser Met His Leu Ile Thr Gln Pro Thr Gln Phe Asp Val Ile
225 230 235 240
Val Thr Glu Asn Leu Phe Gly Asp Ile Leu Ser Asp Glu Ala Ser Val
245 250 255
Ile Pro Gly Ser Leu Gly Leu Ser Pro Ser Ala Ser Phe Gly Gln Thr
260 265 270
Gly Thr Arg Leu Tyr Glu Pro Ile His Gly Ser Ala Pro Asp Ile Ala
275 280 285
Asn Glu Asp Lys Ala Asn Pro Phe Gly Met Val Leu Ser Leu Ala Leu
290 295 300
Cys Leu Arg Glu Ser Leu Asn Gln Asn Asp Ala Ala Asn Glu Leu Glu
305 310 315 320
Ser Ile Val Tyr Ser Phe Ile Gln Ser Asn Lys Thr Thr Ala Asp Leu
325 330 335
Gly Gly Gln Tyr Arg Thr Ser Glu Ile Phe Lys Leu Leu Lys Glu Lys
340 345 350
Tyr Leu

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<210> 6336
<211> 321
<212> PRT
<213> S.epidermidis

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<400> 6336
Phe Ile Met Arg Arg Leu Phe Ala Ile Gly Glu Ala Leu Ile Asp Phe
1 5 10 15
Ile Pro Asn Val Thr His Ser Lys Leu Lys Asp Val Glu Gln Phe Ser
20 25 30
Arg Gln Val Gly Gly Ala Pro Cys Asn Val Ala Ala Thr Val Ser Lys
35 40 45
Leu Gly Gly Lys Ser Glu Met Ile Thr Gln Leu Gly Asn Asp Ala Phe
50 55 60
Gly Asp Ile Ile Val Glu Thr Ile Glu Gln Leu Gly Val Gly Thr Gln
65 70 75 80
Tyr Ile Lys Arg Thr Asn Lys Ala Asn Thr Ala Leu Ala Phe Val Ser
85 90 95
Leu Gln Asp Asp Gly Gln Arg Asp Phe Ser Phe Tyr Arg Lys Pro Ser
100 105 110
Thr Asp Met Leu Tyr Gln Pro Glu Asn Ile Asp Asp Ile Gln Ile Phe
115 120 125
Gln Asp Asp Ile Leu His Phe Cys Ser Val Asp Leu Ile Glu Ser Asp
130 135 140
Met Lys Asn Ala His Glu Lys Met Ile Glu Lys Phe Glu Ser Val Gly

```

145 150 155 160
 Gly Thr Ile Val Phe Asp Pro Asn Val Arg Leu Pro Leu Trp Glu Asp
 165 170 175
 Lys Leu Glu Cys Gln Arg Thr Ile Asn Ala Phe Ile Pro Lys Ala His
 180 185 190
 Ile Val Lys Ile Ser Asp Glu Glu Leu Leu Phe Ile Thr Gly Lys Lys
 195 200 205
 Asn Glu Asp Glu Ala Ile Gln Ser Leu Phe Arg Gly Gln Val Asn Val
 210 215 220
 Val Ile Tyr Thr Gln Gly Ala Gln Gly Ala Thr Ile Tyr Thr Lys Asp
 225 230 235 240
 Asp Tyr Arg Ile His Glu Gly Tyr Gln Val Gln Ala Ile Asp Thr
 245 250 255
 Thr Gly Ala Gly Asp Ala Phe Ile Gly Ala Ile Ile Tyr Cys Ile Leu
 260 265 270
 Glu Ser Arg His Ser Glu Cys Lys Asp Leu Phe Lys Glu Lys Gly Lys
 275 280 285
 Asp Ile Leu Ala Phe Ser Asn Arg Val Ala Ala Leu Thr Thr Thr Lys
 290 295 300
 His Gly Ala Ile Glu Ser Leu Pro Thr Lys Glu Asp Ile Lys Asp Tyr
 305 310 315 320
 Tyr

<210> 6337

<211> 282

<212> PRT

<213> S.epidermidis

<400> 6337

Phe Cys Val Gly Leu Arg Lys Phe Phe Val His Tyr Asn His Phe Arg
 1 5 10 15
 Arg Lys Met Met Asp Ile Asp Lys Leu Glu Val Gly Lys Arg Ile Lys
 20 25 30
 Asn Ile Arg Leu Asn Lys Ser Lys Asn Leu Arg Glu Phe Gly Glu Leu
 35 40 45
 Ile Ser Lys Asn Leu Lys Glu Asp Lys Asn Ile Ser Asp Ser Ile Val
 50 55 60
 Ser Arg Trp Glu Lys Gly Val Ser Ile Pro Ser Ala Lys Arg Leu Lys
 65 70 75 80
 Glu Ile Ala Asp Ile Gly Asn Val Ser Val Asn Tyr Leu Leu Tyr Gly
 85 90 95
 Val Lys Val Thr Tyr Lys Asp Ile His Asn Asn Ile Asn Thr Val Ser
 100 105 110
 Met Lys Asn Glu Ile Met Asp Asn Leu Glu Lys Phe Leu Lys Tyr Tyr
 115 120 125
 Leu Leu Tyr Ser Glu Tyr Asn Asn Tyr Ser Ile Lys Thr Ala Glu Leu
 130 135 140
 Leu Asp Leu Leu Phe Glu Asn Ala Gly Tyr Asp Ile Thr Thr Leu Thr
 145 150 155 160
 Lys Asp Leu Cys Ala Leu Val Ser Asp Lys Arg Phe Ser Phe Tyr Gln
 165 170 175
 His Gly Val Tyr Leu Leu Leu Asn Glu Asp Phe Ser Lys Leu His Val
 180 185 190
 Gln Leu Tyr Leu Ser Glu Phe Ile Tyr Asn Leu Leu Val Gln Ile Thr
 195 200 205

Leu Asp Tyr Pro Asn Ile Tyr Ile Lys Asn Leu Val Leu Gln Ile Thr
 210 215 220
 Glu Thr Lys Glu Arg Ile Lys Asp Ile Ser His Lys Lys Asp Ala Tyr
 225 230 235 240
 Thr Glu Phe Glu Ile Glu Thr His Leu Ala Asp Phe Ile Asn His Lys
 245 250 255
 Glu Tyr Lys Lys Leu Leu Asp Asn Leu Ser Gln Leu Glu Lys Lys Ile
 260 265 270
 Thr Asn Asp Asn Ser Leu Ile Asp Asn Asn
 275 280

<210> 6338

<211> 546

<212> PRT

<213> S.epidermidis

<400> 6338

Lys Glu Lys Gly Glu Leu Asn Phe Met Thr Asn Asn Gln Thr Leu Val
 1 5 10 15
 Leu Ile Ile Leu Thr Phe Ile Ile Leu Ile Thr Leu Val Asn Val Ile
 20 25 30
 Ile Ser Ile Ile Glu Arg Arg Lys Gln Ile Ala Lys Ile Asn Thr Leu
 35 40 45
 Trp Asp Asn Lys Leu Lys Leu Glu Ser Phe Ile Arg Pro Asn Ser Arg
 50 55 60
 Phe Asp Ala Gln Tyr His Ala Tyr Arg Asp His Tyr Asn Glu Gln Ser
 65 70 75 80
 Phe Ile Asp Asp Lys Thr Trp Ser Asp Leu Asn Met Asp Thr Leu Phe
 85 90 95
 His Lys Ile Asn Phe Asn Phe Thr Ala Ile Gly Glu Met Arg Leu Tyr
 100 105 110
 Ala Thr Leu Arg Gly Met Phe Lys Val Asn Gln Thr Ser Leu Ile Asn
 115 120 125
 Lys Phe Lys Asp Asn Lys Val Phe Arg Leu Asn Val Ser Tyr Ile Leu
 130 135 140
 Ser Lys Ile Gly Lys Asn Val Tyr Pro Leu Phe Pro Asp Gln Met Leu
 145 150 155 160
 Pro Thr Lys Arg Asn Ile Leu Leu Met Phe Cys Pro Leu Leu Pro Phe
 165 170 175
 Ile Gly Val Ala Phe Ile Phe Leu Ile Pro Ser Lys Gly Ile Leu Ile
 180 185 190
 Cys Leu Thr Phe Met Ile Leu Asn Ala Ile Leu Ser Phe Lys Leu Lys
 195 200 205
 Lys Ser Tyr Asp Gln Asp Leu Lys Ser Ile Phe Tyr Thr Ala Asn Val
 210 215 220
 Ile Lys Gln Ser Gln Ala Leu Ser Lys Ile Glu Ser Thr Pro Ala Ile
 225 230 235 240
 Ser Val Asp Phe Thr His Phe Lys Ala Ser Arg Arg Phe Ser Gly Leu
 245 250 255
 Leu Val Arg Val Glu Ser Gln Asp Met Ala Ser Ser Ile Ile Met Phe
 260 265 270
 Ile Lys Leu Val Phe Met Ile Asp Tyr Phe Leu Phe His Leu Ile Gln
 275 280 285
 Arg Ser Tyr Phe Lys Tyr Gln Glu Glu Val Met Ala Cys Tyr Asp Tyr
 290 295 300
 Ile Ser Ile Leu Asp Asn His Tyr Ser Ile Ala Met Tyr Gln His Thr

2800

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305          310          315          320
Leu Thr His Tyr Cys Tyr Pro Lys Ile Asn His Asn Ile Asn Gly Leu
          325          330          335
Gln Met Lys Ser Ile Ile His Pro Leu Leu Asp Glu Glu Asn Ala Ile
          340          345          350
Ala Asn Thr Ile Asp Ile Ser Asn His Ile Leu Leu Thr Gly Ser Asn
          355          360          365
Ala Ser Gly Lys Ser Thr Phe Met Lys Ala Val Ala Leu Asn Leu Ile
          370          375          380
Leu Ala Gln Ser Ile Gln Thr Ala Thr Ala His Ser Phe Ile Tyr Gln
385          390          395          400
Pro Gly Tyr Val Met Thr Ser Met Ala Asn Ala Asp Asp Val Leu Ser
          405          410          415
Gly Asp Ser Tyr Phe Met Ser Glu Leu Lys Ser Ile Arg Arg Leu Phe
          420          425          430
Asn Thr His Gln Cys Asn Lys Ile Tyr Cys Phe Ile Asp Glu Ile Phe
          435          440          445
Lys Gly Thr Asn Thr Thr Glu Arg Ile Ala Ala Ser Glu Ser Val Leu
          450          455          460
Ser Tyr Leu Asp Asn Gln Lys Ala Tyr Gln Val Ile Ala Ala Thr His
465          470          475          480
Asp Val Glu Leu Ser Thr Leu Leu Glu Asn Thr Tyr Asn Asn Tyr His
          485          490          495
Phe Asn Glu Ser Ile Gln Glu Asn Ser Ile Phe Phe Asp Tyr Lys Ile
          500          505          510
Lys Pro Gly Lys Ala Asn Thr Arg Asn Ala Ile Glu Leu Leu Arg Ile
          515          520          525
Thr Gln Phe Pro Ile Asp Ile Tyr Gln Arg Ala Gln Gln Asn Ile Arg
530          535          540
Asn Leu
545

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<210> 6339

<211> 160

<212> PRT

<213> S.epidermidis

<400> 6339

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Ile Ile Arg Gly Gly Thr Lys Leu Val Lys Pro Thr Arg Glu Gln Leu
1          5          10          15
Asn Ile Arg Lys Met Ser Val Glu Asp Val Pro Lys Val Phe Asp Ile
          20          25          30
Glu Arg Asn Ser Phe Ser His Ser Ser Trp Ser Ile Asp Ala Phe Tyr
          35          40          45
His Glu Ile Glu Asn Asn Glu Phe Ala Thr Tyr Phe Val Ile Glu Phe
          50          55          60
Ser Asp Lys Ile Ile Gly Tyr Val Gly Leu Trp Leu Val Val Asp Gln
65          70          75          80
Ala Gln Ile Thr Thr Ile Ala Ile Ser Lys Ala Phe Arg Gly Tyr Gly
          85          90          95
Leu Gly Gln Leu Leu Leu Lys Tyr Ala Met Asn Tyr Ala Arg Phe Ser
          100          105          110
Cys Asp Val Met Ser Leu Glu Val Arg Ile Asp Asn Asp Val Ala Gln
          115          120          125
His Val Tyr Arg Asn Leu Gly Phe Gln Asn Gly Gly Lys Arg Lys Asn
130          135          140

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Seq. = 6339

Tyr Tyr Gly Glu Gly Glu Asp Ala Leu Val Met Trp Val Asn Leu Lys
 145 150 155 160

<210> 6340

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6340

Pro Leu Leu Leu Thr Phe Gln His Arg Ala Gly Val Ser Pro Tyr Thr
 1 5 10 15
 Ser Pro Tyr Gly Leu Ala Glu Thr Cys Val Phe Asp Lys Gln Ser Leu
 20 25 30
 Gly Pro Ile His Cys Gly Ser Ser Gly Arg Glu Pro
 35 40

<210> 6341

<211> 437

<212> PRT

<213> S.epidermidis

<400> 6341

Pro Tyr Leu Ile Leu Leu Phe Lys Lys Thr Leu Ile Met Met Phe Leu
 1 5 10 15
 Lys Glu Val Val Ser Met Asn Met Asn Asp Thr Ile Phe Leu Phe Leu
 20 25 30
 Cys Thr Leu Leu Val Trp Leu Met Thr Pro Gly Leu Ser Leu Phe Tyr
 35 40 45
 Gly Gly Leu Val Gln Ser Lys Asn Ala Leu Asn Thr Val Met Gln Ser
 50 55 60
 Met Val Ala Ile Val Ile Val Thr Phe Val Trp Ile Ile Ile Gly Phe
 65 70 75 80
 Ser Leu Ser Phe Asp Gly Gly Asn Gln Trp Ile Gly Gly Leu Lys Phe
 85 90 95
 Leu Gly Leu His His Val Gly Phe Glu Thr Ser Lys Thr Leu Ser Pro
 100 105 110
 His Ile Pro Leu Ser Leu Phe Met Leu Phe Gln Met Met Phe Cys Thr
 115 120 125
 Ile Ala Val Ser Ile Leu Ser Gly Ser Ile Ala Glu Lys Met Arg Phe
 130 135 140
 Ile Pro Tyr Leu Ile Phe Val Ser Leu Trp Val Leu Leu Ile Tyr Ser
 145 150 155 160
 Pro Val Ala His Trp Val Trp Gly Gly Gly Trp Ile Ser Lys Ile Gly
 165 170 175
 Ala Ile Asp Tyr Ala Gly Gly Thr Val Val His Ile Thr Ser Gly Val
 180 185 190
 Ser Gly Leu Val Leu Gly Ile Met Ile Gly Ile Gly Lys Lys Lys Glu
 195 200 205
 Lys His Thr Pro His Asn Leu Leu Ile Thr Leu Ile Gly Gly Ile Leu
 210 215 220
 Val Trp Leu Gly Trp Tyr Gly Phe Asn Val Gly Ser Ala Phe Thr Phe
 225 230 235 240
 Asp His Ile Ala Met Ile Ser Phe Val Asn Thr Val Ile Gly Ala Ser
 245 250 255
 Ala Gly Ala Phe Gly Trp Leu Ile Phe Glu Tyr Ile Leu Lys Lys Thr
 260 265 270

Thr Ser Leu Leu Gly Leu Leu Ser Gly Ala Leu Ser Gly Leu Val Ala
 275 280 285
 Ile Thr Pro Ala Ala Gly Tyr Val Ser Tyr Met Ser Ala Met Ile Ile
 290 295 300
 Ala Ile Ile Gly Gly Ile Cys Cys Tyr Ile Val Ile Asn Leu Ile Lys
 305 310 315 320
 Val Lys Leu Gln Tyr Asn Asp Ala Leu Asp Ala Phe Gly Ile His Gly
 325 330 335
 Val Gly Gly Ile Leu Gly Ala Val Leu Thr Gly Val Phe Gln Ser His
 340 345 350
 Gln Ile Asn Ser Ala Val Gln Asn Gly Phe Ile Tyr Thr Ala Asp Phe
 355 360 365
 Lys Val Val Val Ile Gln Leu Gly Ala Ala Ile Ala Thr Val Val Phe
 370 375 380
 Ser Ala Ile Val Thr Phe Leu Ile Ala Arg Phe Ile Lys Ile Phe Thr
 385 390 395 400
 Pro Leu Ala Thr Thr Gln Glu Glu Asp Lys Thr Gly Leu Asp Ala Ile
 405 410 415
 Val His Gly Glu Lys Ala Tyr Phe Tyr Gly Glu Leu Asn Lys Phe Asn
 420 425 430
 Arg His Ile Lys Phe
 435

<210> 6342

<211> 178

<212> PRT

<213> S.epidermidis

<400> 6342

Asn Ser Arg Ile Leu Thr Glu Ser Lys Ile Asn Lys Thr Glu Ile Thr
 1 5 10 15
 Asp Ile Val Val Ala Lys Gly Pro Gly Ser Tyr Thr Gly Leu Arg Ile
 20 25 30
 Gly Val Thr Val Ala Lys Thr Leu Ala Tyr Ala Leu Asn Thr Asn Leu
 35 40 45
 Tyr Gly Val Ser Ser Leu Lys Ala Leu Ala Ser Thr Val Lys Asp Ser
 50 55 60
 Thr Lys Leu Leu Val Pro Ile Phe Asp Ala Arg Arg Glu Ala Val Tyr
 65 70 75 80
 Ala Gly Val Tyr Gln Tyr Gln Asp Asn Glu Leu Ile Thr Ile Ile Asp
 85 90 95
 Asp Thr Tyr Ile Pro Ile Phe Glu Leu Ile Glu Lys Leu His Gln Leu
 100 105 110
 Asn Gln Pro Tyr Val Phe Val Gly Tyr His Thr Glu Lys Ile Lys His
 115 120 125
 Leu Leu Asp Ser Asp Ile Val Glu Gln Leu Pro Gln Ala Ser Ser Met
 130 135 140
 Lys Gln Leu Ile Gln Lys Pro Glu Asn Ile His Ser Phe Thr Pro Lys
 145 150 155 160
 Tyr His Lys Leu Ser Glu Ala Glu Arg Asn Trp Leu Asn Gln Gln Glu
 165 170 175
 Asn Asn

<210> 6343

<211> 368

<212> PRT

<213> S.epidermidis

<400> 6343

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Glu Phe Gly Ile Pro Lys Trp Trp Gln Lys Lys Glu Leu Leu Trp Arg
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Arg Arg Gly Arg Ile Ser His Val Gly Glu Phe Glu Met Thr Asn Asn
      20      25      30
Lys Leu Ile Leu Ala Ile Glu Thr Ser Cys Asp Glu Thr Ser Val Ser
      35      40      45
Val Ile Lys Asn Gly Thr Glu Leu Leu Ser Asn Thr Val Leu Ser Gln
      50      55      60
Ile Asp Ser His Lys Arg Phe Gly Gly Val Val Pro Glu Val Ala Ser
65      70      75      80
Arg His His Val Glu Gly Ile Thr Ala Thr Ile Asp Glu Ser Leu Val
      85      90      95
Ser Ala Lys Val Lys Met Glu Asp Ile Asp Ala Ile Ala Val Thr Gln
      100      105      110
Gly Pro Gly Leu Ile Gly Ala Leu Leu Ile Gly Ile Asn Ala Ala Lys
      115      120      125
Ala Leu Ala Phe Ala Tyr Asp Lys Pro Ile Ile Pro Val His His Ile
      130      135      140
Ala Gly His Ile Tyr Ala Asn His Leu Glu Gln Pro Leu Thr Phe Pro
145      150      155      160
Leu Met Ser Leu Ile Val Ser Gly Gly His Thr Glu Leu Val Tyr Met
      165      170      175
Lys Asn His Leu Asp Phe Glu Val Ile Gly Glu Thr Arg Asp Asp Ala
      180      185      190
Val Gly Glu Ala Tyr Asp Lys Val Ala Arg Thr Ile Asn Leu Pro Tyr
      195      200      205
Pro Gly Gly Pro His Ile Asp Arg Leu Ala Ala Lys Gly Lys Asp Val
      210      215      220
Tyr Asp Phe Pro Arg Val Trp Leu Glu Lys Asp Ser Tyr Asp Phe Ser
225      230      235      240
Phe Ser Gly Leu Lys Ser Ala Val Ile Asn Lys Leu His Asn Leu Arg
      245      250      255
Gln Lys Asn Ile Glu Ile Val Ala Glu Asp Val Ala Thr Ser Phe Gln
      260      265      270
Asn Ser Val Val Glu Val Leu Thr Tyr Lys Ala Ile His Ala Cys Lys
      275      280      285
Thr Tyr His Val Asn Arg Leu Ile Val Ala Gly Gly Val Ala Ser Asn
      290      295      300
Lys Gly Leu Arg Thr Ala Leu Ser Glu Ala Cys Lys Lys Glu Gly Ile
305      310      315      320
His Leu Thr Ile Pro Ser Pro Val Leu Cys Thr Asp Asn Ala Ala Met
      325      330      335
Ile Gly Ala Ala Gly Tyr Tyr Leu Tyr Gln Ala Gly Leu Arg Gly Asp
      340      345      350
Leu Ala Leu Asn Gly Gln Asn Asn Ile Asp Ile Glu Thr Phe Ser Val
      355      360      365

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<210> 6344

<211> 249

<212> PRT

<213> S.epidermidis

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1				5					10					15		
Val	Phe	Leu	Met	Glu	Glu	His	Ile	Gln	Ile	Phe	Asp	Thr	Thr	Leu	Arg	
			20					25					30			
Asp	Gly	Glu	Gln	Thr	Pro	Gly	Val	Asn	Phe	Thr	Phe	Asp	Glu	Arg	Leu	
		35					40					45				
Lys	Ile	Ala	Lys	Gln	Leu	Glu	Lys	Trp	Gly	Val	Asp	Val	Leu	Glu	Ala	
	50					55					60					
Gly	Phe	Pro	Ala	Ser	Ser	Thr	Gly	Ser	Phe	Lys	Ser	Val	Glu	Ala	Ile	
65					70					75					80	
Ala	Lys	Thr	Leu	Thr	Thr	Ala	Val	Cys	Gly	Leu	Ala	Arg	Cys	Lys		
			85					90					95			
Lys	Ser	Asp	Ile	Asp	Ala	Val	Tyr	Glu	Ala	Thr	Lys	Glu	Ala	Ile	Lys	
			100					105					110			
Pro	Gln	Val	His	Val	Phe	Ile	Ala	Thr	Ser	Pro	Ile	His	Leu	Glu	His	
		115					120					125				
Lys	Leu	Lys	Met	Thr	Gln	Asp	Glu	Val	Leu	Thr	Ser	Ile	Lys	Glu	His	
	130					135					140					
Val	Ser	Tyr	Ala	Lys	Gln	Phe	Phe	Glu	Val	Val	Gln	Phe	Ser	Pro	Glu	
145					150					155					160	
Asp	Ala	Thr	Arg	Thr	Glu	Ile	Pro	Phe	Leu	Ile	Glu	Cys	Val	Gln	Thr	
				165					170					175		
Ala	Ile	Asn	Ala	Gly	Ala	Thr	Ile	Ile	Asn	Ile	Pro	Asp	Thr	Val	Gly	
		180						185					190			
Phe	Ser	Tyr	Pro	Thr	Glu	Tyr	Gly	Glu	Ile	Phe	Lys	Gln	Leu	Thr	Gln	
	195						200					205				
Ala	Val	Lys	Ser	Asn	Ser	Lys	Ile	Ile	Phe	Ser	Ala	His	Cys	His	Asp	
	210					215					220					
Asp	Leu	Gly	Met	Ala	Val	Ala	Asn	Ser	Leu	Ala	Ala	Ile	Glu	Gly	Gly	
225				230						235					240	
Ala	Arg	Arg	Ile	Glu	Gly	Thr	Val	Asn	Gly	Ile	Gly	Glu	Arg	Ala	Gly	
				245					250					255		
Asn	Ala	Ser	Leu	Glu	Glu	Val	Ala	Leu	Ala	Leu	Tyr	Val	Arg	Lys	Asp	
		260						265					270			
His	Tyr	Gly	Leu	Glu	Ser	Gln	Ile	Asn	Leu	Lys	Glu	Thr	Lys	Lys	Thr	
	275						280					285				
Ser	Asp	Leu	Ile	Ser	Arg	Tyr	Ala	Gly	Ile	Arg	Val	Pro	Arg	Asn	Lys	
	290					295					300					
Ala	Ile	Val	Gly	Gln	Asn	Ala	Phe	Ser	His	Glu	Ser	Gly	Ile	His	Gln	
305					310					315					320	
Asp	Gly	Val	Leu	Lys	His	Arg	Glu	Thr	Tyr	Glu	Ile	Met	Thr	Pro	Gln	
			325						330					335		
Leu	Val	Gly	Val	Asn	Thr	Thr	Glu	Leu	Pro	Leu	Gly	Lys	Leu	Ser	Gly	
		340						345					350			
Lys	His	Ala	Phe	Ala	Glu	Lys	Leu	Lys	Ala	Leu	Gly	Tyr	Glu	Ile	Lys	
	355						360					365				
Leu	Glu	Asp	Gln	Val	Thr	Leu	Phe	Lys	Gln	Phe	Lys	Glu	Ile	Ala	Asp	
	370					375					380					
Lys	Lys	Lys	Asn	Val	Ser	Asp	Arg	Asp	Ile	His	Ala	Ile	Ile	His	Gly	
385					390					395					400	
Ser	Glu	His	Glu	His	Asn	Ala	Ile	Phe	Gln	Leu	Asp	Asn	Leu	Gln	Leu	
				405					410					415		
Gln	Tyr	Val	Ser	Lys	Gly	Leu	Gln	Ser	Ala	Val	Val	Val	Ile	Lys	Glu	
		420						425					430			
Arg	Asn	Gly	Gln	Val	Lys	Gln	Asp	Ser	Ser	Ile	Gly	Thr	Gly	Ser	Ile	
	435						440					445				
Val	Ala	Ile	Tyr	Asn	Ala	Val	Asp	Arg	Ile	Phe	Lys	Lys	Asp	Ala	Glu	

450 455 460
 Leu Ile Asp Tyr Arg Ile Asp Ser Val Thr Glu Gly Thr Asp Ala Gln
 465 470 475 480
 Ala Glu Val His Val Arg Ile Ile Ile Asn His Ile Glu Val Thr Gly
 485 490 495
 Ile Gly Ile Asp His Asp Ile Leu Lys Ala Ser Cys Lys Ala Tyr Ile
 500 505 510
 Asp Ala His Ala Lys Tyr Ile Ser Glu Tyr Glu Leu Lys Glu Gly Ile
 515 520 525
 Arg Thr
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<210> 6347

<211> 63

<212> PRT

<213> S.epidermidis

<400> 6347

Leu Phe Ser Ser Ile Ile Leu Val Ile Phe Ser Phe Val Ala Gly Leu
 1 5 10 15
 Thr Asp Pro Leu Phe Lys Lys Arg Glu Thr Val Leu Phe Asp Thr Pro
 20 25 30
 Ala Asn Phe Ala Ile Ser Asp Ile Phe Phe Ile Lys Asn His Leu Ser
 35 40 45
 Arg His Gln Ser Phe Phe Phe Ile Leu Pro Tyr Glu Pro Thr Leu
 50 55 60

<210> 6348

<211> 339

<212> PRT

<213> S.epidermidis

<400> 6348

Leu Glu Glu Phe Ile Met Thr Lys Val Tyr Tyr Asp Glu Thr Val Thr
 1 5 10 15
 Gln Asp Ala Leu Gln Gly Lys Lys Ile Ala Val Ile Gly Tyr Gly Ser
 20 25 30
 Gln Gly His Ala His Ala Gln Asn Leu Lys Asp Asn Gly Tyr Asp Val
 35 40 45
 Val Ile Gly Leu Arg Pro Gly Arg Ser Phe Asn Lys Ala Lys Glu Asp
 50 55 60
 Gly Phe Asp Val Tyr Thr Val Ser Glu Ala Thr Gln Gln Ala Asp Val
 65 70 75 80
 Val Met Val Leu Leu Pro Asp Glu Ile Gln Gly Glu Val Tyr Asn Lys
 85 90 95
 Glu Ile Lys Pro Tyr Leu Glu Lys Gly Asn Ala Leu Ala Phe Ala His
 100 105 110
 Gly Phe Asn Ile His Phe Ser Val Ile Glu Pro Pro Ser Asp Val Asp
 115 120 125
 Val Phe Leu Val Ala Pro Lys Gly Pro Gly His Leu Val Arg Arg Thr
 130 135 140
 Phe Val Glu Gly Ser Ala Val Pro Ala Leu Phe Gly Val Gln Gln Asp
 145 150 155 160
 Ala Thr Gly Gln Ala Arg Asn Ile Ala Leu Ser Tyr Ala Lys Gly Ile
 165 170 175
 Gly Ala Thr Arg Ala Gly Val Ile Glu Thr Thr Phe Lys Glu Glu Thr

Tyr Phe Met
225

<210> 6350
<211> 82
<212> PRT
<213> S.epidermidis

<400> 6350

Arg	Leu	Lys	Ser	Tyr	Arg	Phe	His	Ser	Ala	Thr	Ser	Leu	Lys	Leu	Phe
1				5					10					15	
Asn	Phe	Ile	Ile	Ser	Leu	Gln	Phe	Thr	Thr	Tyr	Ser	Ala	Asn	Val	Leu
		20						25					30		
Ser	Thr	Ser	Lys	Leu	Met	Leu	Cys	Phe	Tyr	Ser	Leu	Ala	Thr	Leu	Ile
		35					40					45			
Thr	Cys	Leu	Pro	Lys	Leu	Ser	Pro	Val	Ser	Arg	Phe	Leu	Lys	Ala	Cys
	50					55					60				
Gly	Thr	Leu	Ser	Lys	Pro	Ser	Ser	Thr	Glu	Thr	Cys	Val	Leu	Ile	Leu
65					70				75					80	
Phe	Ser														

<210> 6351
<211> 326
<212> PRT
<213> S.epidermidis

<400> 6351

Arg	Gly	Glu	Ser	His	Met	Ile	Lys	Gln	Asn	Leu	Lys	Met	Arg	Tyr	Thr
1				5					10					15	
Ile	Val	Leu	Leu	Leu	Leu	Ile	Phe	Ser	Thr	Ile	Phe	Ser	Leu	Cys	Ile
		20						25					30		
Gly	Ser	Val	Met	Ile	Asn	Pro	Ile	His	Ala	Val	Thr	Gly	Phe	Phe	Leu
		35					40					45			
His	Asn	Asp	Phe	Ile	Leu	Asn	Glu	Tyr	Arg	Ile	Pro	Arg	Thr	Leu	Leu
	50					55					60				
Gly	Leu	Leu	Ile	Gly	Ser	Ser	Leu	Ala	Ile	Ser	Gly	Ser	Val	Ile	Gln
65					70				75					80	
Gly	Val	Ile	Arg	Asn	Pro	Leu	Ala	Ser	Pro	Asp	Val	Ile	Gly	Ile	Thr
			85					90					95		
Lys	Gly	Ala	Ser	Leu	Ala	Ala	Val	Met	Ile	Ile	Met	Ile	Phe	Pro	Ser
			100					105					110		
Ala	Pro	Leu	Phe	Val	Leu	Pro	Leu	Gly	Ser	Phe	Ile	Gly	Ala	Leu	Thr
	115						120					125			
Ile	Ser	Ile	Ile	Leu	Ser	Val	Leu	Ile	Ser	Lys	Phe	Asp	Val	Lys	Gly
	130					135					140				
Ser	Lys	Leu	Ala	Leu	Ile	Gly	Leu	Ala	Ile	Gly	Ala	Ile	Cys	Thr	Ala
145					150				155					160	
Ile	Val	Gln	Phe	Leu	Leu	Ile	Arg	Asn	Pro	Leu	Asp	Ala	Asn	Asn	Ala
			165					170					175		
Leu	Leu	Trp	Leu	Thr	Gly	Ser	Leu	Tyr	Gly	His	Asn	Ile	Val	Asn	Phe
		180						185					190		
Tyr	Ser	Leu	Leu	Pro	Trp	Phe	Ile	Ile	Thr	Val	Pro	Ile	Val	Leu	Leu
	195					200						205			
Leu	Gly	Tyr	Gln	Leu	Asp	Ile	Leu	Asn	Leu	Gly	Asp	His	Val	Ala	Ile
210						215					220				

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Ala Leu Gly Ala Arg Val Lys Ile Leu Lys Met Ile Leu Leu Val Leu
 225 230 235 240
 Ala Val Met Leu Ala Gly Ala Ser Ile Ala Val Val Gly Gly Ile Ser
 245 250 255
 Phe Leu Gly Leu Ile Ala Pro His Ile Ala Arg Gln Leu Val Gly His
 260 265 270
 Lys Asn Ile His Val Ile Ile Met Ser Gly Leu Val Gly Ala Ile Leu
 275 280 285
 Leu Thr Phe Gly Asp Gly Leu Ala Arg Gly Ile Gln Pro Pro Leu Asp
 290 295 300
 Ile Pro Val Gly Val Val Ile Ala Ile Ile Gly Ala Pro Tyr Phe Leu
 305 310 315 320
 Phe Leu Leu Arg Lys Met
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<210> 6352

<211> 335

<212> PRT

<213> S.epidermidis

<400> 6352

Gly Val Glu Ser Val Arg Gly Leu Lys Ile Leu Ser Val Ile Gly Leu
 1 5 10 15
 Leu Phe Val Leu Ile Ala Thr Ala Ala Cys Gly Asn Asn Ser Ser Ser
 20 25 30
 Asn Ser Ser Lys Glu Ser Ser Lys Asp Gly Val Glu Ile Lys His Glu
 35 40 45
 Glu Gly Thr Thr Lys Val Pro Lys His Pro Lys Arg Val Val Val Leu
 50 55 60
 Glu Tyr Ser Phe Val Asp Ala Leu Val Ala Leu Asp Val Lys Pro Val
 65 70 75 80
 Gly Ile Ala Asp Asp Asn Lys Lys Asn Arg Ile Ile Lys Pro Leu Arg
 85 90 95
 Asp Lys Ile Gly Lys Tyr Thr Ser Val Gly Thr Arg Lys Gln Pro Asn
 100 105 110
 Leu Glu Glu Ile Ser Lys Leu Lys Pro Asp Leu Ile Ile Ala Asp Asn
 115 120 125
 Asn Arg His Lys Gly Ile Tyr Lys Asp Leu Asn Lys Ile Ala Pro Thr
 130 135 140
 Ile Glu Leu Lys Ser Phe Asp Gly Asp Tyr Asn Glu Asn Ile Asp Ala
 145 150 155 160
 Phe Lys Thr Ile Ser Lys Ala Leu Gly Lys Glu Glu Glu Gly Lys Lys
 165 170 175
 Arg Leu Glu Glu His Asp Lys Lys Ile Glu Glu Tyr Lys Lys Glu Ile
 180 185 190
 Thr Met Asp Lys Asn Gln Lys Val Leu Pro Ala Val Ala Ala Lys Ser
 195 200 205
 Gly Leu Leu Ala His Pro Ser Asn Ser Tyr Val Gly Gln Phe Leu Ser
 210 215 220
 Gln Leu Gly Phe Lys Glu Ala Leu Ser Asp Asp Val Thr Lys Gly Leu
 225 230 235 240
 Ser Lys Tyr Leu Lys Gly Pro Tyr Leu Gln Met Asn Thr Glu Thr Leu
 245 250 255
 Ser Gln Val Asn Pro Glu Arg Met Phe Ile Met Thr Asn Lys Ala Ser
 260 265 270
 Ser Asn Glu Pro Ser Leu Lys Glu Leu Glu Lys Asp Pro Val Trp Lys

275	280	285
Lys Leu Asn Ala Val Lys Asn Gln Arg Val Asp Ile Leu Asp Arg Asp		
290	295	300
Leu Trp Ala Arg Ser Arg Gly Leu Ile Ser Ser Glu Glu Met Ala Lys		
305	310	315
Glu Leu Val Glu Leu Ser Lys Lys Asp Ser Lys Lys Asp Asn Lys		
325	330	335

<210> 6353

<211> 40

<212> PRT

<213> S.epidermidis

<400> 6353

Ile Gln Asn Pro Tyr Ser Cys Ser Lys Ile Lys His Val Lys Ser Val
1 5 10 15
Glu Phe Leu Asp Glu Thr Phe Leu Ile Leu Gly His Ser Ile Val Leu
20 25 30
Lys Lys Leu Glu Tyr Asp Ala Phe
35 40

<210> 6354

<211> 314

<212> PRT

<213> S.epidermidis

<400> 6354

Gly Arg Cys Pro Met Ile Leu Thr Leu Thr Leu Asn Pro Ser Val Asp
1 5 10 15
Ile Ser Tyr Pro Leu Asp Gln Phe Asn Leu Asp Thr Val Asn Arg Val
20 25 30
Ser Gln Thr Ser Lys Thr Ala Gly Gly Lys Gly Leu Asn Val Thr Arg
35 40 45
Val Leu Ser Glu Phe Gly Glu Asp Val Ile Ala Ser Gly Phe Leu Gly
50 55 60
Gly Ala Leu Gly Gln Tyr Ile Glu Glu Gln Ile Glu Thr Thr Arg Ile
65 70 75 80
Lys Gln Ala Phe Phe Lys Ile Lys Gly Glu Thr Arg Asn Cys Ile Ala
85 90 95
Ile Leu His Glu Gly Gln Gln Thr Glu Ile Leu Glu Lys Gly Pro Thr
100 105 110
Ile Glu Leu Lys Glu Ser Glu Glu Phe Lys Ser His Leu Leu Lys Leu
115 120 125
Phe Lys Glu Thr Asp Val Ala Val Met Ser Gly Ser Leu Pro Lys Gly
130 135 140
Leu Asn Thr Asp Tyr Tyr Ala Asp Ile Val Arg Leu Ala Lys Glu Gln
145 150 155 160
Gly Ile Leu Thr Ile Leu Asp Ser Ser Gly Gln Ser Leu Glu Glu Val
165 170 175
Leu Ile Ser Asn Val Lys Pro Thr Val Ile Lys Pro Asn Ile Asp Glu
180 185 190
Leu Ser Gln Leu Leu Asn Tyr Lys Val Thr Asn Asp Ile Lys Glu Leu
195 200 205
Lys Ala Ala Val Ser Gln Pro Ile Phe Asn Asp Ile Glu Trp Ile Ile
210 215 220
Val Ser Leu Gly Ser Glu Gly Ala Phe Ala Lys His Asn Gln Lys Phe

225 230 235 240
 Tyr Lys Val Asn Ile Pro Asn Ile Lys Val Val Asn Pro Val Gly Ser
 245 250 255
 Gly Asp Ser Thr Val Ala Gly Ile Ala Ser Gly Leu Ile His Gln Gln
 260 265 270
 Thr Asp Glu Glu Leu Leu Lys Lys Ala Asn Ala Phe Gly Met Leu Asn
 275 280 285
 Ala Met Glu Gln Gln Thr Gly His Ile Asn Thr Asp Lys Phe Asp Glu
 290 295 300
 Ile Phe Lys Gln Ile Glu Val Ile Glu Val
 305 310

<210> 6355
 <211> 121
 <212> PRT
 <213> S.epidermidis

<400> 6355
 Tyr Pro Ser Pro Tyr Cys Leu Leu Val Ile Lys Thr Pro Thr Val Pro
 1 5 10 15
 Ser Pro Ile Asn Glu Ala Arg Leu Ser Thr Val Asp Leu Pro Gly Lys
 20 25 30
 Val Asn Lys Gly Arg Met Ile Gly Leu Lys Met Gly Pro Ser Asn Ser
 35 40 45
 Asn Arg Pro Tyr Ser Ile Asn Lys Gly Lys Lys Ile Ala Ala Asn Lys
 50 55 60
 Asn Thr Ala Thr Arg Val Gly Asn Lys Leu Glu Asn Thr Asn Pro Pro
 65 70 75 80
 Val Ser Ser Asp Leu Ile Ile Ser Gly Pro Ile Phe Lys Asn Val Asn
 85 90 95
 Gln Glu Lys Lys Thr Ala Asn Thr Leu Lys Thr Ser His Pro Ile Leu
 100 105 110
 Thr Leu Lys Ala Leu Leu Ile Lys Pro
 115 120

<210> 6356
 <211> 100
 <212> PRT
 <213> S.epidermidis

<400> 6356
 Arg Leu Pro Pro Thr Tyr Tyr Arg Gly Cys Trp His Val Val Ser Arg
 1 5 10 15
 Gly Phe Leu Ile Arg Tyr Arg Gln Asp Val His Ser Tyr Leu His Ile
 20 25 30
 Cys Ser Ser Leu Ile Thr Glu Phe Tyr Asp Pro Lys Thr Phe Ile Thr
 35 40 45
 His Ala Ala Leu Leu Arg Gln Ala Phe Ala His Cys Gly Arg Phe Pro
 50 55 60
 Thr Ala Ala Ser Arg Arg Ser Leu Asp Arg Val Ser Val Pro Val Trp
 65 70 75 80
 Pro Ile Thr Leu Ser Gly Arg Leu Arg Ile Val Ala Leu Val Ser Arg
 85 90 95
 Tyr Pro Thr Asn
 100

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<210> 6357
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 6357
 Phe Val Thr Phe Arg Tyr Cys Leu Leu Glu Leu Thr Ser Thr Tyr Cys
 1 5 10 15
 His Ser Val Phe Asn Val His Leu Val Lys Ser Ile Phe Phe Ile Val
 20 25 30
 Leu Tyr Cys Phe Lys Lys Ser Gln
 35 40

<210> 6358
 <211> 359
 <212> PRT
 <213> S.epidermidis

<400> 6358
 Gly Gly Phe Thr Leu Leu Thr Val Asn Gln Val Lys Glu Ile Val Gly
 1 5 10 15
 Ala Leu Lys Asp Pro Ile Ile Asp Val Pro Leu Arg Glu Ser Glu Gly
 20 25 30
 Ile Val Asp Val Ser Ile Lys Asp Asn Ile Asn His Val Ser Val Lys
 35 40 45
 Val Ala Met Ala Gln Leu Gly Gly Gln Pro Gln Leu Asp Leu Gln Met
 50 55 60
 Ala Ile Val Lys Ala Leu Lys Glu Asn Gly Ala Asn Thr Val Gly Ile
 65 70 75 80
 Arg Phe Glu Glu Leu Pro Ser Glu Val Val Glu Arg Tyr Ile Gly Lys
 85 90 95
 Gly Ser Glu Lys Pro Lys Thr Ile Glu Glu Leu Leu Ser Gln Asn Asn
 100 105 110
 Pro Val Glu Phe Ile Ser Ile Ala Ser Gly Lys Gly Gly Val Gly Lys
 115 120 125
 Ser Thr Val Ala Val Asn Leu Ala Val Ala Leu Ala Arg Glu Gly Lys
 130 135 140
 Lys Val Gly Leu Val Asp Ala Asp Ile Tyr Gly Phe Ser Val Pro Asp
 145 150 155 160
 Met Met Gly Ile Asp Glu Arg Pro Gly Ile Asp Gly Lys Glu Ile Ile
 165 170 175
 Pro Val Glu Arg His Gly Val Lys Val Ile Ser Met Ala Phe Phe Val
 180 185 190
 Glu Glu Asn Ala Pro Val Ile Trp Arg Gly Pro Met Leu Gly Lys Met
 195 200 205
 Leu Thr Asn Phe Phe Thr Glu Val Gln Trp Gly Glu Leu Asp Tyr Leu
 210 215 220
 Leu Leu Asp Leu Pro Pro Gly Thr Gly Asp Val Ala Leu Asp Val His
 225 230 235 240
 Ser Met Leu Pro Ser Ser Lys Glu Ile Ile Val Thr Thr Pro His Pro
 245 250 255
 Thr Ala Ala Phe Val Ala Ala Arg Ala Gly Ala Met Ala Lys His Thr
 260 265 270
 Glu His Thr Ile Leu Gly Val Ile Glu Asn Met Ser Tyr Phe Glu Ser
 275 280 285
 Lys Glu Thr Gly Lys Lys Glu Tyr Val Phe Gly Lys Gly Gly Gly Lys

290 295 300
 Lys Leu Ser Asp Glu Leu Glu Thr Gln Leu Phe Ala Glu Leu Pro Leu
 305 310 315 320
 Glu Gln Pro Thr Trp Asn Pro Asn Asp Phe Ser Pro Ser Ile Tyr Gln
 325 330 335
 Ser Asp Asp Arg Leu Gly Glu Leu Tyr Thr Leu Ile Ala Arg Lys Val
 340 345 350
 Ile Val Ser Thr Gln Lys Gln
 355

<210> 6359
 <211> 221
 <212> PRT
 <213> S.epidermidis

<400> 6359
 Gly Gly Asn Thr Val Gly Gln Lys Ile Asn Pro Ile Gly Leu Arg Val
 1 5 10 15
 Gly Val Ile Arg Asp Trp Glu Ala Lys Trp Tyr Ala Glu Lys Asp Phe
 20 25 30
 Ala Ser Leu Leu His Glu Asp Leu Lys Ile Arg Lys Phe Ile Asp Asn
 35 40 45
 Glu Leu Lys Glu Ala Ser Val Ser His Val Asp Ile Glu Arg Ala Ala
 50 55 60
 Asn Arg Ile Asn Ile Ala Ile His Thr Gly Lys Pro Gly Met Val Ile
 65 70 75 80
 Gly Lys Gly Gly Ser Glu Ile Glu Lys Leu Arg Asn Lys Leu Asn Thr
 85 90 95
 Leu Thr Asp Lys Lys Val His Ile Asn Val Ile Glu Ile Lys Lys Ile
 100 105 110
 Asp Ile Asp Ala Arg Leu Val Ala Glu Asn Ile Ala Arg Gln Leu Glu
 115 120 125
 Asn Arg Ala Ser Phe Arg Arg Val Gln Lys Gln Ala Ile Thr Arg Ala
 130 135 140
 Met Lys Asn Gly Ala Lys Gly Ile Lys Thr Gln Val Ser Gly Arg Leu
 145 150 155 160
 Gly Gly Ala Asp Ile Ala Arg Ala Glu Gln Tyr Ser Glu Gly Thr Val
 165 170 175
 Pro Leu His Thr Leu Arg Ala Asp Ile Asp Tyr Ala His Ala Glu Ala
 180 185 190
 Asp Thr Thr Tyr Gly Lys Leu Gly Val Lys Val Trp Ile Tyr Arg Gly
 195 200 205
 Glu Val Leu Pro Thr Lys Asn Thr Ser Glu Gly Gly Lys
 210 215 220

<210> 6360
 <211> 83
 <212> PRT
 <213> S.epidermidis

<400> 6360
 Gly Arg Asp Thr Met Ala Asp Asn Asn Asn Gln Asn Gly Gln Asp Ala
 1 5 10 15
 Thr Gln Gln Phe Ile Asn Ile Leu Lys Ser Phe Lys Trp Arg Ile Ile
 20 25 30
 Gly Phe Leu Ala Phe Leu Ile Ile Ala Ile Leu Phe Leu Thr Leu Gly

<212> PRT

<213> S.epidermidis

<400> 6363

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Arg Arg Asp Thr Phe Met Ala Arg Arg Glu Glu Glu Thr Lys Glu Phe
1      5      10      15
Glu Glu Arg Val Val Thr Ile Asn Arg Val Ala Lys Val Val Lys Gly
20      25      30
Gly Arg Arg Phe Arg Phe Thr Ala Leu Val Val Val Gly Asp Lys Asn
35      40      45
Gly Arg Val Gly Phe Gly Thr Gly Lys Ala Gln Glu Val Pro Glu Ala
50      55      60
Ile Lys Lys Ala Val Glu Ala Ala Lys Lys Asp Leu Val Val Val Pro
65      70      75      80
Arg Val Glu Gly Thr Thr Pro His Thr Ile Thr Gly Gln Tyr Gly Ser
85      90      95
Gly Ser Val Phe Met Lys Pro Ala Ala Pro Gly Thr Gly Val Ile Ala
100      105      110
Gly Gly Pro Val Arg Ala Val Leu Glu Leu Ala Gly Ile Thr Asp Ile
115      120      125
Leu Ser Lys Ser Leu Gly Ser Asn Thr Pro Ile Asn Met Val Arg Ala
130      135      140
Thr Ile Asn Gly Leu Gln Asn Leu Lys Asn Ala Glu Asp Val Ala Lys
145      150      155      160
Leu Arg Gly Lys Ser Val Glu Glu Leu Tyr Asn
165      170

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<210> 6364

<211> 163

<212> PRT

<213> S.epidermidis

<400> 6364

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Phe Ile Arg Thr Ala Ile Met Asn Glu Ala Phe Ile Phe Arg Arg Thr
1      5      10      15
Ile Ile Met Arg Gln Thr Phe Met Ala Asn Glu Ser Asn Ile Glu Arg
20      25      30
Lys Trp Tyr Val Ile Asp Ala Glu Gly Gln Thr Leu Gly Arg Leu Ser
35      40      45
Ser Glu Val Ala Ala Ile Leu Arg Gly Lys Asn Lys Val Thr Tyr Thr
50      55      60
Pro His Val Asp Thr Gly Asp Tyr Val Ile Ile Ile Asn Ala Ser Lys
65      70      75      80
Ile Glu Phe Thr Gly Asn Lys Glu Gln Asp Lys Met Tyr Tyr Arg His
85      90      95
Ser Asn His Pro Gly Gly Leu Lys Ser Ile Ser Ala Gly Glu Leu Lys
100      105      110
Arg Thr Asn Pro Glu Arg Leu Leu Glu Thr Ser Ile Lys Gly Met Leu
115      120      125
Pro Ser Thr Arg Leu Gly Glu Lys Gln Gly Lys Lys Leu Phe Val Tyr
130      135      140
Gly Gly Ala Glu His Pro His Ala Ala Gln Gln Pro Glu Asn Tyr Glu
145      150      155      160
Leu Arg Gly

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<210> 6365
 <211> 340
 <212> PRT
 <213> S.epidermidis

<400> 6365

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Arg Gly Gly Thr Met Lys Ala Ile Gly Phe Lys Ser Ser Phe Gln Leu
1      5      10      15
Asp Glu Gly Asn Cys Phe Glu Glu Phe Asn Phe Asp Ile Pro His Pro
20     25     30
Ser Gly His Glu Leu Leu Val Lys Val Gln Ser Ile Ser Val Asn Pro
35     40     45
Val Asp Thr Lys Gln Arg Thr Met Pro Val Asp Lys Ala Pro Arg Val
50     55     60
Leu Gly Phe Asp Ala Val Gly Val Ile Glu Lys Ile Gly Asp Gln Val
65     70     75     80
Ser Met Phe Gln Glu Gly Asp Val Val Phe Tyr Ser Gly Ser Pro Asn
85     90     95
Gln Asn Gly Ser Asn Glu Glu Tyr Gln Leu Ile Glu Glu Tyr Leu Val
100    105    110
Ala Lys Ala Pro Thr Asn Leu Lys Ser Glu Gln Ala Ala Ser Leu Pro
115    120    125
Leu Thr Gly Leu Thr Ala Tyr Glu Thr Leu Phe Asp Val Phe Gly Ile
130    135    140
Ser Lys Glu Pro Ser Glu Asn Lys Gly Lys Ser Leu Leu Ile Ile Asn
145    150    155    160
Gly Ala Gly Gly Val Gly Ser Ile Ala Thr Gln Ile Ala Lys Phe Tyr
165    170    175
Gly Leu Lys Val Ile Thr Thr Ala Ser Arg Glu Asp Thr Ile Lys Trp
180    185    190
Ser Val Asn Met Gly Ala Asp Val Val Leu Asn His Lys Lys Asp Leu
195    200    205
Ser Gln Gln Phe Lys Asp Asn His Ile Glu Gly Val Asp Tyr Ile Phe
210    215    220
Cys Thr Phe Asp Thr Asp Met Tyr Tyr Glu Met Met Val Asn Leu Val
225    230    235    240
Lys Pro Arg Gly His Ile Ala Thr Ile Val Ala Phe Asn Ser Gln Gln
245    250    255
Asp Leu Asn Leu Leu Lys Ser Lys Ser Val Thr Phe Thr His Glu Phe
260    265    270
Met Phe Ser Arg Pro Leu His His Thr Asp Asp Val Ile Lys His His
275    280    285
Glu Tyr Leu Lys Asp Ile Thr Glu Lys Val Glu Gln Gly Tyr Tyr Gln
290    295    300
Pro Thr Thr Thr Lys Val Ile Asp Gly Leu Asp Val Asp Ser Leu Tyr
305    310    315    320
Glu Ala His Gln Ile Leu Glu Ser His Ser Met Ile Gly Lys Leu Val
325    330    335
Ile Asn Leu Lys
340

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<210> 6366
 <211> 41
 <212> PRT
 <213> S.epidermidis

6365-6366

<400> 6366

Ala Ile Ser Thr Asn Ile Arg Asn Ile Tyr Thr Pro Glu Asn Phe Lys
 1 5 10 15
 Ile Asn Asn Ile Val Ala Ile Gly Ile Lys Ser Lys Thr Val Asn Val
 20 25 30
 Ser Leu Tyr Cys Gln Cys Asn Asn Leu
 35 40

<210> 6367

<211> 116

<212> PRT

<213> S.epidermidis

<400> 6367

Leu Pro Val Thr Asn Arg Arg Lys Val Gly Met Thr Ser Asn His His
 1 5 10 15
 Ala Pro Tyr Asp Leu Gly Tyr Thr Arg Ala Thr Met Asp Asn Thr Lys
 20 25 30
 Gly Ser Glu Thr Ala Arg Ser Ser Lys Ser His Lys Val Val Leu Ser
 35 40 45
 Ser Asp Cys Ser Leu Gln Leu Asp Tyr Met Lys Leu Glu Ser Leu Val
 50 55 60
 Ile Val Asp Gln His Ala Thr Val Asn Thr Phe Pro Gly Leu Val His
 65 70 75 80
 Thr Ala Arg His Thr Thr Arg Val Cys Asn Thr Arg Ser Arg Trp Ser
 85 90 95
 Asn His Leu Glu Leu Ala Val Glu Gly Gly Thr Asn Asp Trp Gly Glu
 100 105 110
 Val Val Thr Arg
 115

<210> 6368

<211> 64

<212> PRT

<213> S.epidermidis

<400> 6368

Phe Asn Tyr Leu Ile Ala Met Ile Asp Asn Ala Ile Lys Asn Cys Asn
 1 5 10 15
 Cys Ile Met Leu Tyr Gln Ala Val Gln Ser Leu Asn Asn Tyr Thr Ile
 20 25 30
 Met Ala Ser Lys Ile Ile Arg Asn Leu Tyr Ile Ile Leu Ser Ile Lys
 35 40 45
 Phe Val Ser Val Ile Lys Ile Trp Leu Asn Met Glu Leu Ser Phe Glu
 50 55 60

<210> 6369

<211> 40

<212> PRT

<213> S.epidermidis

<400> 6369

Ile Thr Arg Ala Ile Met Ser Thr Pro Lys Leu Gly Ala Ile Ala Ala
 1 5 10 15
 Thr Ile Asp Pro Ile Arg Asn Asp Pro Ile Ala Pro Lys Tyr Ser Gly
 20 25 30

6366
6367
6368
6369

Leu Val Phe Thr Leu Ser Ile Lys
35 40

<210> 6370

<211> 123

<212> PRT

<213> S.epidermidis

<400> 6370

Ile Asn Met Ala Arg Ile Ala Gly Val Asp Ile Pro Arg Glu Lys Arg
1 5 10 15
Ile Val Ile Ser Leu Thr Tyr Val Tyr Gly Ile Gly Thr Ser Thr Ala
20 25 30
Asn Lys Ile Val Glu Glu Ala Asn Val Ser Ala Asp Thr Arg Val Lys
35 40 45
Asp Leu Thr Asp Asp Glu Leu Gly Arg Ile Arg Glu Val Val Asp Gly
50 55 60
Tyr Lys Val Glu Gly Asp Leu Arg Arg Glu Gln Asn Leu Asn Ile Lys
65 70 75 80
Arg Leu Met Glu Ile Ser Ser Tyr Arg Gly Ile Arg His Arg Arg Gly
85 90 95
Leu Pro Val Arg Gly Gln Lys Thr Lys Asn Asn Ala Arg Thr Arg Lys
100 105 110
Gly Pro Val Lys Thr Val Ala Asn Lys Lys Lys
115 120

<210> 6371

<211> 279

<212> PRT

<213> S.epidermidis

<400> 6371

Ala Thr Met Ala Leu Lys Lys Tyr Lys Pro Ile Thr Asn Gly Arg Arg
1 5 10 15
Asn Met Thr Thr Leu Asp Phe Ala Glu Ile Thr Lys Thr Thr Pro Glu
20 25 30
Lys Ser Leu Leu Gln Pro Leu Pro Lys Arg Ala Gly Arg Asn Asn Gln
35 40 45
Gly Lys Leu Thr Val Arg His His Gly Gly Gly His Lys Arg Gln Tyr
50 55 60
Arg Val Ile Asp Phe Lys Arg Asn Lys Asp Gly Ile Thr Ala Lys Val
65 70 75 80
Asp Ser Ile Gln Tyr Asp Pro Asn Arg Ser Ala Asn Ile Ala Leu Leu
85 90 95
Val Tyr Ala Asp Gly Glu Lys Arg Tyr Ile Ile Ala Pro Lys Gly Leu
100 105 110
Gln Ile Gly Gln Thr Val Glu Ser Gly Ala Glu Ala Asp Ile Lys Val
115 120 125
Gly Asn Ala Leu Pro Leu Gln Asn Ile Pro Val Gly Thr Val Ile His
130 135 140
Asn Ile Glu Leu Lys Pro Gly Lys Gly Gly Gln Leu Ala Arg Ser Ala
145 150 155 160
Gly Ala Ser Ser Gln Val Leu Gly Lys Glu Gly Lys Tyr Val Leu Ile
165 170 175
Arg Leu Arg Ser Gly Glu Val Arg Met Ile Leu Ser Thr Cys Arg Ala
180 185 190

Thr Ile Gly Gln Val Gly Asn Leu Gln His Glu Leu Val Asn Val Gly
 195 200 205
 Lys Ala Gly Arg Ser Arg Trp Lys Gly Val Arg Pro Thr Val Arg Gly
 210 215 220
 Ser Val Met Asn Pro Asn Asp His Pro His Gly Gly Gly Glu Gly Arg
 225 230 235 240
 Ala Pro Ile Gly Arg Pro Ser Pro Met Ser Pro Trp Gly Lys Pro Thr
 245 250 255
 Leu Gly Lys Lys Thr Arg Arg Gly Lys Lys Ser Ser Asp Lys Leu Ile
 260 265 270
 Val Arg Gly Arg Lys Lys Lys
 275

<210> 6372

<211> 654

<212> PRT

<213> S.epidermidis

<400> 6372

Ile Met Asn Phe Asn Gln Phe Ile Asn Lys Gln Asn Ile Ile Met Thr
 1 5 10 15
 Glu Asp Glu His Asn Val Tyr Asp Phe Leu Lys His His Asn Pro Asn
 20 25 30
 Trp Ser Ser Asn Tyr Ile Asp His Leu Leu Asp Gly Arg Asp Lys Val
 35 40 45
 Ser Gln Arg Leu Ile Thr Ser Leu His Arg Glu Asn Leu Val Lys Ser
 50 55 60
 Arg Asp His Ser Arg Ile Leu Asn Arg His Gln Phe Ala Gly Tyr Gly
 65 70 75 80
 Val Asn Val Ile Ala Ile Leu Glu Ile Tyr Phe Pro Thr Ser Asn Ile
 85 90 95
 Tyr Leu Tyr Ala Pro Ile Thr Gly Met His Ala Phe Asp Arg Ile Asp
 100 105 110
 Val Glu Gly Pro Phe Tyr Phe Lys Asn Leu Ser Lys Glu Asp Asp Phe
 115 120 125
 Glu Arg Val Leu His Pro Asn Gln Ile Leu Asp Trp Ile Leu Ile Glu
 130 135 140
 Asp Glu Asn Leu Asn Asn Glu Ala Ser Val Gln Phe Arg Asn Asp Leu
 145 150 155 160
 Asn Asn Ser Ala Ala Asn Met Thr Phe Ala Leu Ser Phe Gln His Tyr
 165 170 175
 Thr Met Arg Asn Glu Arg Ala Pro Leu Tyr Asn Leu Ile Lys Asn Ala
 180 185 190
 Asn Asp Ser Tyr Leu Arg Ser Glu Gln Ser Val Ile Glu Gly His Pro
 195 200 205
 Leu His Pro Gly Ala Lys Leu Arg Lys Gly Met Asn Ala Glu Glu Asn
 210 215 220
 Phe Met Tyr Ser Ser Glu Phe Gly Asn Val Ile His Leu Arg Ala Val
 225 230 235 240
 Phe Ile His Lys Ser Ile Ser Arg Ile Gln Ser Ser Asn Val Asp Tyr
 245 250 255
 Asn Val Ala Val Lys Gln Met Phe Pro Asp Leu Ile Lys Thr Leu Glu
 260 265 270
 Lys Glu Phe Gly Glu Asp Phe Asn Leu Gln Asn Tyr His Leu Met Met
 275 280 285
 Val His Pro Trp Gln Ile Lys His Ile Leu Gln Ser Asp Tyr Arg Asp

290 295 300
 Glu Leu Asn Glu Lys Leu Ile Leu Ile Ser Asn His Ser Val Pro Tyr
 305 310 315 320
 Tyr Ala Gly Leu Ser Phe Arg Thr Leu Val Pro Lys Gln Pro Asp Leu
 325 330 335
 Ser Pro His Ile Lys Leu Ser Thr Asn Val His Ile Thr Gly Glu Ile
 340 345 350
 Arg Thr Leu Ser Glu Gln Thr Thr Tyr Asn Gly Pro Leu Val Thr Gln
 355 360 365
 Ile Leu Arg Glu Ile Met Ser Lys Asp Glu Asp Phe Ser His Tyr Gln
 370 375 380
 Ser Thr Tyr Ile Asp Glu Asn Ala Gly Ile His Phe Tyr Asn Arg Asn
 385 390 395 400
 Asp Asn Glu Ala Ile Gln Thr Asp Arg Ser Glu Gln Leu Gly Thr Leu
 405 410 415
 Phe Arg Asn Asn Leu Tyr Gln Phe Ile Ser Asn Glu Thr Val Pro Val
 420 425 430
 Ile Pro Ser Ser Leu Val Ala Thr Tyr Pro Tyr Asn Thr Glu Ala Pro
 435 440 445
 Ile Cys Thr Leu Ile Lys Thr Tyr Gln Asn Thr Tyr Gln Tyr Lys Asn
 450 455 460
 Tyr Glu Glu Ala Ala Lys Gln Trp Ile Lys Asp Tyr Ser Lys Ala Leu
 465 470 475 480
 Leu Gly Leu Val Ile Pro Leu Tyr Ser Lys Tyr Gly Ile Ser Leu Glu
 485 490 495
 Ala His Leu Gln Asn Ser Val Ala Thr Phe Asn Lys Asp Gly Ser Leu
 500 505 510
 Asn Met Ile Tyr Ile Arg Asp Phe Glu Gly Leu Arg Ile Asp Asn Glu
 515 520 525
 Gln Leu Asn Asn Ala Gly Phe Thr Thr Arg His Phe His Glu Lys Ser
 530 535 540
 Arg Ile Leu Thr Asn Ser Lys Thr Ser Val Phe Asn Lys Met Phe Tyr
 545 550 555 560
 Ser Thr Val Gln Asn His Leu Gly Glu Leu Val Ile Thr Ile Ala Lys
 565 570 575
 Tyr Ser Asn Ser Lys Val Leu Glu Gln Glu Ile Trp Gln Ile Ile Ser
 580 585 590
 Gln Thr Val Glu Asp Ile Phe Asn His Met Thr His Ile Ser Lys Gln
 595 600 605
 His Leu Asn Asn Ile Lys Arg Thr Ile Phe Ala Ser Glu Ile Asp Tyr
 610 615 620
 Lys Cys Val Thr Thr Met Arg Leu Glu Asp Gln Ala His Glu Tyr Thr
 625 630 635 640
 Tyr Ile Lys Val His Asn Pro Leu His Arg Lys Asn Asp Leu
 645 650

<210> 6373

<211> 492

<212> PRT

<213> S.epidermidis

<400> 6373

Ile Trp Asn Tyr His Leu Asn Lys Lys Glu Tyr Met Phe Met Ala Ser
 1 5 10 15
 Tyr Glu Leu Ser Lys Thr Lys Arg Asn Leu Ile Val Ser Val Met Leu
 20 25 30

Ile	Ser	Ala	Phe	Val	Ala	Ile	Leu	Asn	Gln	Thr	Leu	Leu	Asn	Thr	Ala
		35					40					45			
Leu	Pro	His	Ile	Met	Arg	Glu	Leu	Asn	Ile	Asn	Glu	Asn	Thr	Ser	Gln
	50					55					60				
Trp	Leu	Ile	Thr	Gly	Phe	Met	Leu	Val	Asn	Gly	Val	Met	Ile	Pro	Leu
65				70						75					80
Thr	Ala	Tyr	Leu	Met	Asp	Lys	Val	Lys	Thr	Arg	Pro	Leu	Tyr	Leu	Gly
			85						90					95	
Ala	Met	Gly	Ser	Phe	Leu	Ile	Gly	Ser	Ile	Val	Ala	Ala	Ile	Ala	Pro
		100						105					110		
Asn	Phe	Gly	Val	Leu	Met	Ile	Ala	Arg	Val	Ile	Gln	Ala	Val	Gly	Ala
	115						120				125				
Gly	Ile	Leu	Met	Pro	Leu	Met	Gln	Phe	Thr	Leu	Phe	Thr	Leu	Phe	Ser
	130					135					140				
Lys	Glu	His	Arg	Gly	Phe	Ala	Met	Gly	Leu	Ala	Gly	Leu	Val	Ile	Gln
145				150						155					160
Phe	Ala	Pro	Ala	Ile	Gly	Pro	Thr	Phe	Thr	Gly	Leu	Ile	Ile	Asp	Asn
			165						170					175	
Ala	Ser	Trp	Arg	Val	Pro	Phe	Ile	Val	Ile	Val	Gly	Ile	Ala	Leu	Val
			180					185					190		
Thr	Phe	Ile	Phe	Gly	Phe	Val	Ser	Ile	Ser	Ser	Tyr	Asn	Thr	Thr	Lys
	195						200					205			
Glu	Thr	Lys	Leu	Asp	Lys	Lys	Ser	Val	Ile	Tyr	Ser	Thr	Leu	Gly	Phe
	210					215					220				
Gly	Leu	Met	Leu	Tyr	Ala	Phe	Ser	Ser	Ala	Gly	Asn	Leu	Gly	Phe	Ser
225					230					235					240
Asn	Pro	Ile	Val	Leu	Cys	Ser	Leu	Leu	Ile	Ser	Leu	Ile	Ile	Ile	Gly
			245						250					255	
Ile	Phe	Val	Lys	Arg	Gln	Ile	Thr	Ile	Ser	Asn	Pro	Leu	Leu	Asn	Leu
			260					265					270		
Lys	Ile	Phe	Asn	Asn	Lys	Ile	Phe	Cys	Phe	Ser	Thr	Ile	Thr	Ser	Met
		275					280					285			
Ile	Ile	Met	Leu	Ser	Met	Val	Gly	Pro	Ala	Leu	Leu	Ile	Pro	Leu	Tyr
	290					295					300				
Val	Gln	Asn	Ala	Leu	Gly	Leu	Ser	Ala	Leu	Leu	Ser	Gly	Leu	Val	Ile
305					310					315					320
Met	Pro	Gly	Ala	Ile	Ile	Asn	Gly	Ile	Met	Ser	Val	Phe	Thr	Gly	Lys
			325						330					335	
Phe	Tyr	Asp	Lys	Tyr	Gly	Pro	Arg	Pro	Leu	Ile	Phe	Thr	Gly	Phe	Ile
		340						345					350		
Leu	Leu	Ile	Ser	Cys	Thr	Phe	Leu	Leu	Cys	Phe	Leu	Lys	Val	Asp	Thr
		355					360					365			
Ser	Tyr	Thr	Tyr	Leu	Ile	Val	Ile	Tyr	Ala	Ile	Arg	Met	Phe	Ala	Val
	370					375					380				
Ser	Leu	Leu	Met	Met	Pro	Ile	Asn	Thr	Thr	Gly	Ile	Asn	Ala	Leu	Lys
385					390					395					400
Thr	Glu	Asp	Ile	Ser	His	Gly	Thr	Ala	Ile	Met	Asn	Phe	Gly	Arg	Val
			405						410					415	
Met	Ala	Gly	Ser	Leu	Gly	Thr	Ala	Leu	Met	Val	Thr	Phe	Met	Ser	Ile
		420						425				430			
Gly	Ala	Gln	Trp	Val	Val	Ser	Ser	Ser	Glu	His	Ala	Ser	Lys	Glu	Met
		435					440					445			
Ile	Gln	Arg	Gln	Ser	Val	Ala	Val	Gly	Val	Asp	Val	Ser	Phe	Ala	Leu
	450					455					460				
Val	Thr	Val	Phe	Val	Ile	Ile	Ala	Phe	Val	Leu	Ala	Leu	Phe	Ile	Lys
465					470					475					480

Glu Pro Asn His Leu Thr His Asn Ser Arg Lys Val
485 490

<210> 6374
<211> 123
<212> PRT
<213> S.epidermidis

<400> 6374
Leu Met Gly Tyr Arg Lys Leu Gly Arg Thr Ser Asp Gln Arg Lys Ala
1 5 10 15
Met Leu Arg Asp Leu Ala Thr Ser Leu Ile Val Ser Glu Arg Ile Glu
20 25 30
Thr Thr Glu Ala Arg Ala Lys Glu Val Arg Ser Val Val Glu Lys Leu
35 40 45
Ile Thr Leu Gly Lys Lys Gly Asp Leu Ala Ser Arg Arg Asn Ala Ala
50 55 60
Lys Thr Leu Arg Asn Val Glu Ile Leu Asn Glu Asp Asp Ser Thr Gln
65 70 75 80
Thr Ala Leu Gln Lys Leu Phe Gly Glu Ile Ala Glu Arg Tyr Ser Glu
85 90 95
Arg Gln Gly Gly Tyr Thr Arg Ile Leu Lys Val Gly Pro Arg Arg Gly
100 105 110
Asp Gly Ala Glu Ser Val Ile Ile Glu Leu Val
115 120

<210> 6375
<211> 404
<212> PRT
<213> S.epidermidis

<400> 6375
Asn Tyr Val Tyr Ile Arg Ser Val Ile Met Leu Asp Lys Asn Gln Leu
1 5 10 15
Glu Lys Tyr Asn Gln Glu His Leu Tyr Glu Tyr Glu Lys Leu Met Ser
20 25 30
Ser Asn Glu Lys Asn Ala Leu Asp Glu Lys Val Asp Gln Leu Asn Leu
35 40 45
Ala Glu Ile Gln Asp Leu Tyr Gln Asp Leu Tyr Val Asn Arg Lys Thr
50 55 60
Ile Asp Asp Val Ser Ser Val Ser Glu Val Lys Tyr Glu Val Lys Ser
65 70 75 80
Arg Leu Asn Glu Glu Arg His Thr Tyr Glu Gln Lys Gly Tyr Glu
85 90 95
Ala Ile Arg Asn Gly Glu Phe Ala Val Leu Leu Met Ala Gly Gly Gln
100 105 110
Gly Thr Arg Leu Gly Tyr Lys Gly Pro Lys Gly Ser Phe Glu Ile Glu
115 120 125
Gly Thr Ser Leu Phe Glu Leu Gln Ala Arg Gln Leu Ile Arg Leu Lys
130 135 140
Glu Glu Thr Gly His Thr Ile Asn Trp Tyr Ile Met Thr Ser Asp Ile
145 150 155 160
Asn His Lys Asp Thr Ile Glu Tyr Phe Lys Gln His Lys Tyr Phe Asn
165 170 175
Tyr Asp Ala Asn His Ile His Phe Phe Lys Gln Asp Asn Ile Val Ala
180 185 190

6374-6375: S.epidermidis

<210> 6378
 <211> 192
 <212> PRT
 <213> S.epidermidis

<400> 6378

Glu	Ala	Ser	Gln	Asn	Val	Val	Leu	Gln	Lys	Lys	Thr	Glu	Glu	Val	Asp
1				5					10					15	
Gly	Tyr	Asn	Ala	Ile	Gln	Val	Gly	Phe	Glu	Asp	Lys	Gln	Ala	Tyr	Lys
		20						25					30		
Lys	Gly	Ser	Lys	Ser	Asn	Lys	Tyr	Ala	Asn	Lys	Pro	Ala	Glu	Gly	His
		35					40						45		
Ala	Lys	Lys	Ala	Asp	Thr	Ala	Pro	Lys	Arg	Phe	Ile	Arg	Glu	Phe	Arg
	50					55					60				
Asn	Val	Asn	Val	Asp	Glu	Tyr	Glu	Val	Gly	Gln	Glu	Val	Ser	Val	Asp
65				70						75					80
Thr	Phe	Glu	Thr	Gly	Asp	Ile	Ile	Asp	Val	Thr	Gly	Val	Ser	Lys	Gly
				85				90						95	
Lys	Gly	Phe	Gln	Gly	Ala	Ile	Lys	Arg	His	Gly	Gln	Gly	Arg	Gly	Pro
			100					105					110		
Met	Ala	His	Gly	Ser	His	Phe	His	Arg	Ala	Pro	Gly	Ser	Val	Gly	Met
		115					120					125			
Ala	Ser	Asp	Ala	Ser	Lys	Val	Phe	Lys	Gly	Gln	Lys	Met	Pro	Gly	Arg
	130					135					140				
Met	Gly	Gly	Asn	Thr	Val	Thr	Val	Gln	Asn	Leu	Glu	Val	Val	Gln	Val
145					150					155					160
Asp	Thr	Glu	Asn	Ser	Val	Ile	Leu	Val	Lys	Gly	Asn	Val	Pro	Gly	Pro
				165					170					175	
Lys	Lys	Gly	Leu	Val	Glu	Ile	Thr	Thr	Ser	Ile	Lys	Lys	Gly	Asn	Lys
			180					185					190		

<210> 6379
 <211> 123
 <212> PRT
 <213> S.epidermidis

<400> 6379

Arg	Met	Ile	Gln	Gln	Glu	Thr	Arg	Leu	Lys	Val	Ala	Asp	Asn	Ser	Gly
1				5					10					15	
Ala	Arg	Glu	Val	Leu	Thr	Ile	Lys	Val	Leu	Gly	Gly	Ser	Gly	Arg	Lys
		20						25					30		
Thr	Ala	Asn	Ile	Gly	Asp	Ile	Ile	Val	Cys	Thr	Val	Lys	Asn	Ala	Thr
		35					40					45			
Pro	Gly	Gly	Val	Val	Lys	Lys	Gly	Asp	Val	Val	Lys	Ala	Val	Val	Val
	50					55					60				
Arg	Thr	Lys	Ser	Gly	Val	Arg	Arg	Glu	Asp	Gly	Ser	Tyr	Ile	Lys	Phe
65					70					75					80
Asp	Glu	Asn	Ala	Cys	Val	Ile	Ile	Arg	Asp	Asp	Lys	Gly	Pro	Arg	Gly
				85					90					95	
Thr	Arg	Ile	Phe	Gly	Pro	Val	Ala	Arg	Glu	Leu	Arg	Glu	Gly	Asn	Phe
			100					105					110		
Met	Lys	Ile	Val	Ser	Leu	Ala	Pro	Glu	Val	Leu					
		115					120								

<210> 6380

<211> 109
 <212> PRT
 <213> S.epidermidis

<400> 6380

Gly	Gly	Ala	His	Met	His	Ile	Lys	Lys	Gly	Asp	Asn	Val	Lys	Val	Ile
1				5					10					15	
Ala	Gly	Lys	Asp	Lys	Gly	Lys	Glu	Gly	Lys	Val	Val	Ala	Thr	Glu	Pro
			20					25					30		
Lys	Lys	Asp	Arg	Val	Val	Val	Glu	Gly	Val	Asn	Val	Val	Lys	Lys	His
		35					40					45			
Gln	Lys	Pro	Thr	Gln	Leu	Asn	Pro	Glu	Gly	Gly	Ile	Leu	Glu	Thr	Glu
	50					55					60				
Ala	Ala	Ile	His	Val	Ser	Asn	Val	Gln	Leu	Leu	Asp	Pro	Lys	Thr	Asn
65					70					75					80
Glu	Pro	Thr	Arg	Val	Gly	Tyr	Lys	Thr	Val	Asp	Gly	Lys	Lys	Val	Arg
			85						90					95	
Ile	Ala	Lys	Lys	Ser	Gly	Glu	Glu	Ile	Lys	Ala	Asn	Asn			
			100					105							

<210> 6381
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 <212> PRT
 <213> S.epidermidis

<400> 6381

Val	Ser	Lys	His	Asn	Asn	Ala	Val	Ile	Met	Asn	Asp	Glu	Val	Ile	Val
1				5					10					15	
Ile	Arg	Asn	Arg	Ser	Pro	Leu	Ser	Tyr	Leu	Ser	Ala	Met	Asp	Pro	Ala
		20						25				30			
Gln	Thr	Leu	Asn	Ser	Lys	Ile	Gly	Ile	Arg	Arg	Gln	Lys	Leu	Thr	Lys
		35					40					45			
Pro	Lys	Tyr	Thr	Ala	Leu										
	50														

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 <212> PRT
 <213> S.epidermidis

<400> 6382

Val	Thr	Met	His	Val	Leu	Thr	Val	Pro	Asn	Gln	Lys	Ala	Thr	Ala	Asn
1				5					10					15	
Tyr	Val	Pro	Ala	Ala	Ala	Val	Ile	Arg	Arg	Trp	Gln	Ala	Leu	Ser	Gly
		20						25				30			
Ile	Ile	Gly	Arg	Lys	Ala	Arg	Val	Gly	Gly	Phe	Leu	Ser	Leu	Met	
		35					40				45				

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<400> 6383

Ile	Thr	Trp	Gln	Ile	Cys	Arg	Arg	Ile	Ile	Gln	Leu	Arg	Arg	Glu	Asn
1				5					10					15	

Lys Leu Trp Leu Asn Tyr Lys Leu Pro Ser Leu Val Val Leu Leu Val
 20 25 30
 Val Leu Lys His Asn Val Lys Leu Leu Lys Leu
 35 40

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 <213> S.epidermidis

<400> 6384
 Pro Lys Leu Lys Pro Ala Lys Thr Thr Ala Lys Ala Ile Ser Asn Gly
 1 5 10 15
 Ser Phe Lys Pro Asn Ile Ile Ile Arg Leu Leu Thr Asn Lys Thr Lys
 20 25 30
 Asn Glu Gln Ile Tyr Asn Val Phe Leu Val Lys Cys Ala Ser Ile Leu
 35 40 45
 Pro Lys Leu Lys Leu Ser Val Ile Gln Ala Thr Asp Asn Gly Asn Ile
 50 55 60
 Thr Asn Pro Leu Cys Lys Gly Asp Lys Leu Ser Phe Ser Cys Lys Tyr
 65 70 75 80
 Thr Gly Ile Tyr Lys Leu Tyr Pro Ile Ser Val Ile Ala Ile Ser Lys
 85 90 95
 Ser Val Ile Lys Thr Arg Thr Ile Asp Met Leu Asn Ser Phe Val Gly
 100 105 110
 Arg Asn Gly Cys Ser Ile Leu Phe Ser Ile Leu Asn Ser Ser His Lys
 115 120 125
 Thr Ala Lys Ala Lys Ile Ile Glu Asn Met Leu Lys Ile Ile
 130 135 140

<210> 6385
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 <213> S.epidermidis

<400> 6385
 Val Met Ala Lys Leu Gln Ile Thr Leu Thr Arg Ser Val Ile Gly Arg
 1 5 10 15
 Pro Glu Thr Gln Arg Lys Thr Val Glu Ala Leu Gly Leu Lys Lys Thr
 20 25 30
 Asn Ser Ser Val Val Val Glu Asp Asn Pro Ala Ile Arg Gly Gln Ile
 35 40 45
 Asn Lys Val Lys His Leu Leu Thr Ile Glu Glu Lys
 50 55 60

<210> 6386
 <211> 73
 <212> PRT
 <213> S.epidermidis

<400> 6386
 Ser Met Ala Lys Gln Asp Val Ile Glu Leu Glu Gly Thr Val Leu Asp
 1 5 10 15
 Thr Leu Pro Asn Ala Met Phe Lys Val Glu Leu Glu Asn Gly His Glu
 20 25 30
 Ile Leu Ala His Val Ser Gly Lys Ile Arg Met Asn Tyr Ile Arg Ile

35 40 45
 Leu Pro Gly Asp Lys Val Thr Val Lys Met Ser Pro Tyr Asp Leu Ser
 50 55 60
 Arg Gly Arg Ile Thr Tyr Arg Tyr Lys
 65 70

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<212> PRT

<213> S.epidermidis

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Lys Glu Ala Asn Lys Val Ala Lys Thr Ser Met Val Ala Lys Gln Gln
 1 5 10 15
 Lys Lys Gln Lys Phe Ala Val Arg Glu Tyr Thr Arg Cys Glu Arg Cys
 20 25 30
 Gly Arg Pro His Ser Val Tyr Arg Lys Phe Lys Leu Cys Arg Ile Cys
 35 40 45
 Phe Arg Glu Leu Ala Tyr Lys Gly Gln Ile Pro Gly Val Arg Lys Ala
 50 55 60
 Ser Trp
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<212> PRT

<213> S.epidermidis

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Leu Met Tyr Asn Leu Lys Leu Thr Phe Ala Lys Glu Val Thr Cys Glu
 1 5 10 15
 Val Lys Arg Leu Lys Asn Phe Ile Leu Gly Leu Leu Ile Val Ala Ile
 20 25 30
 Val Gly Phe Leu Leu Phe Met Tyr Ile Asp Asp Ser Arg Ile Gln Ser
 35 40 45
 Tyr Gln Asp Tyr Phe Leu Gln Phe Asn Trp Phe Gln Pro Leu Leu Ile
 50 55 60
 Gly Leu Ala Gly Leu Leu Ile Leu Ile Gly Leu Ile Leu Val Leu Ser
 65 70 75 80
 Ile Phe Lys Pro Thr His Arg Lys Pro Gly Leu Tyr Lys Asn Phe Asp
 85 90 95
 Asp Gly His Ile Tyr Val Ser Arg Lys Ala Val Glu Lys Thr Ile Tyr
 100 105 110
 Asp Thr Ile Ala Lys Tyr Asp Gln Val Arg Gln Pro Asn Val Val Ser
 115 120 125
 Lys Leu Tyr Asn Lys Lys Asn Lys Ser Phe Ile Asp Ile Lys Ala Asp
 130 135 140
 Phe Phe Val Pro Asn His Val Gln Val Lys Ser Leu Thr Glu Ser Ile
 145 150 155 160
 Arg Ala Asp Ile Lys Ser Asn Val Glu His Phe Thr Glu Ile Pro Val
 165 170 175
 Arg Lys Leu Glu Val Asn Val Arg Asp Gln Lys Thr Ser Gly Pro Arg
 180 185 190
 Val Leu

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Phe Lys Asn Lys Gly Glu Cys Ile Met Ala Val Asp Asn Asn Lys Ala
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Lys Gln Ala Tyr Asp Asn Gln Thr Gly Val Asn Glu Gln Glu Arg Lys
20      25      30
Glu Gln Gln Gln Ala Gln Asn Asn Gln Pro Gln Phe Glu Asn Lys Leu
35      40      45
Thr Phe Ser Asp Glu Val Val Glu Lys Ile Ala Gly Ile Ala Ala Arg
50      55      60
Glu Val Lys Gly Ile Leu Asp Met Lys Gly Gly Phe Thr Asp Ser Phe
65      70      75      80
Thr Asn Ala Phe Ser Asn Gly Asn Asn Val Thr Thr Gly Val Ser Val
85      90      95
Glu Val Gly Glu Lys Gln Ala Ala Val Asp Leu Lys Val Ile Leu Glu
100     105     110
Tyr Gly Glu Ser Ala Pro Lys Ile Phe Arg Lys Val Thr Asp Leu Val
115     120     125
Lys Glu Gln Val Lys Tyr Ile Thr Gly Leu Glu Val Val Glu Val Asn
130     135     140
Met Gln Val Asp Asp Val Met Thr Lys Lys Glu Trp Gln Gln Lys Asn
145     150     155     160
Glu Lys Asp Asn Lys Glu Asn Asn Glu Arg Glu Gly Leu Lys
165     170

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 <213> S.epidermidis

<400> 6390

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Glu Val Asn Lys Ser Met Asn Lys Tyr Asp Arg Leu Asp Glu Ile Thr
1      5      10      15
Lys Leu Val Asn Lys Arg Gly Ser Val Arg Thr Asn Glu Ile Val Glu
20      25      30
Asp Leu Asn Val Ser Asp Met Thr Val Arg Arg Asp Leu Ala Glu Leu
35      40      45
Glu Glu Lys Gly Val Leu Thr Lys Ile His Gly Gly Ala Arg Ser Asn
50      55      60
Ser Ala Phe Gln Tyr Lys Glu Met Ser His Gln Glu Lys His Thr Arg
65      70      75      80
Phe Ile Glu Glu Lys Arg Phe Ile Ala Lys Asn Ala Val Asp Leu Ile
85      90      95
Glu Asp Gly Asp Thr Ile Phe Leu Gly Pro Gly Thr Thr Val Gln Lys
100     105     110
Leu Ala Glu Glu Ile Asn His Tyr Ser Leu Thr Ile Ile Thr Asn Cys
115     120     125
Leu Pro Val Phe Asn Ile Leu Ile Lys Lys Gln Thr Leu His Phe Arg
130     135     140
Val Tyr Leu Leu Gly Gly Glu Met Arg Asp Leu Thr Glu Ala Phe Val
145     150     155     160
Gly Glu Met Thr Asn Gln Leu Leu Ser Gln Leu Arg Phe Ser Lys Met

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				165					170					175			
Phe	Phe	Ser	Ser	Asn	Gly	Val	Lys	Asp	Gly	Leu	Ala	Met	Thr	Ser	Ser		
			180					185					190				
Ile	Glu	Glu	Ala	Tyr	Thr	Gln	Gln	Ile	Ala	Leu	Ser	His	Ser	Leu	Glu		
		195					200					205					
Lys	Tyr	Leu	Leu	Ile	Asp	Ser	Ser	Lys	Ile	Gly	Lys	Asp	Asp	Phe	Ser		
	210					215					220						
Ser	Phe	Cys	Glu	Leu	Arg	Glu	Leu	Asn	Ala	Val	Leu	Thr	Asp	Asn	Asn		
225					230					235					240		
Asp	Leu	Glu	Lys	Lys	Glu	Lys	Ile	Glu	Ser	Tyr	Val	Glu	Val	Ile	Ser		
				245					250					255			

<210> 6391

<211> 75

<212> PRT

<213> S.epidermidis

<400> 6391

His	Ser	Asp	Lys	Phe	Asn	Ser	Thr	Ser	Tyr	Tyr	Val	Asn	Phe	Phe	Lys		
1				5					10					15			
Ser	Ile	His	Ile	Tyr	Ser	Ile	His	Phe	Tyr	Leu	Phe	Ile	Ser	Ile	Cys		
			20					25					30				
Asn	Leu	Lys	Tyr	Ile	Thr	Leu	Tyr	Ile	Cys	Ile	Ile	Leu	Asn	Asn	Tyr		
		35					40					45					
Val	Lys	Asn	Thr	Ile	Arg	Tyr	Leu	Leu	Thr	Phe	Ser	Lys	Ser	Ile	Leu		
	50					55					60						
Thr	Leu	Phe	His	Leu	Ser	Ser	Ser	Ile	Arg	Ile							
65					70					75							

<210> 6392

<211> 168

<212> PRT

<213> S.epidermidis

<400> 6392

Phe	Arg	Cys	Lys	Asp	Leu	Lys	Ala	Leu	Phe	Gln	Lys	His	Met	Cys	Leu		
1				5					10					15			
Ile	Thr	Leu	Ile	Gln	Lys	Arg	Arg	Leu	Ile	Met	Thr	Ile	Ile	Ile	Gly		
			20					25					30				
Ser	Asp	Val	Asp	Gly	Lys	Arg	Leu	Lys	Glu	Leu	Ile	Lys	Asp	Tyr	Leu		
		35					40					45					
Glu	Asp	Asn	Asp	Tyr	Asp	Val	Leu	Asp	Val	Thr	Glu	Gly	Lys	Asp	Leu		
	50					55				60							
Asp	Phe	Val	Asp	Ser	Thr	Val	Ser	Val	Ala	Lys	Glu	Val	Gln	Lys	Ser		
65					70					75					80		
Asp	Asp	Asn	Leu	Gly	Ile	Ala	Ile	Asp	Ala	Tyr	Gly	Ala	Gly	Ser	Phe		
				85					90					95			
Ile	Val	Ala	Thr	Lys	Ile	Lys	Gly	Met	Ile	Ala	Ala	Glu	Val	Ser	Asp		
			100					105					110				
Glu	Arg	Ser	Ala	Tyr	Met	Thr	Arg	Ser	His	Asn	Asn	Ala	Arg	Met	Ile		
		115					120					125					
Thr	Met	Gly	Ala	Glu	Ile	Val	Gly	Asp	Thr	Leu	Ala	Lys	Asn	Val	Ala		
	130					135					140						
Lys	Glu	Phe	Val	Asn	Gly	His	Tyr	Asp	Gly	Gly	Arg	His	Gln	Ile	Arg		
145					150					155					160		
Val	Asp	Met	Leu	Asn	Lys	Met	Cys										

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 <211> 74
 <212> PRT
 <213> S.epidermidis

<400> 6393

Ala	Asn	Ile	Leu	Val	Val	Trp	Ala	Thr	Pro	His	Pro	Phe	Pro	Leu	Asn
1				5					10					15	
Ile	Tyr	Phe	Gly	Thr	Leu	Ala	Gly	Gly	Leu	Gly	Cys	Phe	Pro	Phe	Glu
			20					25					30		
His	Gly	Pro	Tyr	His	Pro	Cys	Ser	Asp	Ser	Gln	Val	Lys	Leu	Ile	Gly
		35					40				45				
Ile	Arg	Ser	Leu	Ser	Glu	Phe	Gly	Asn	Pro	Arg	Gly	Ala	Pro	Arg	Pro
	50					55					60				
Asn	Ser	Ala	Leu	Pro	Pro	Ile	Ile	Ile	Thr						
65					70										

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<400> 6394

Tyr	Thr	Val	Asn	Leu	Asn	Tyr	Cys	Arg	Met	Phe	Ser	Asp	Ile	Lys	Ile
1			5						10					15	
Leu	Gly	Val	Val	Asp	Val	Asn	Gly	Ser	Asn	Pro	Ile	Ile	Glu	Phe	Lys
			20					25					30		
Asp	Val	Ser	Phe	Gln	Tyr	Gln	Ser	Asp	Ala	Ala	Phe	Thr	Leu	Asn	Arg
		35					40				45				
Val	Ser	Phe	Ser	Ile	Pro	Ala	Gly	Gln	Trp	Thr	Ser	Ile	Val	Gly	His
	50					55					60				
Asn	Gly	Ser	Gly	Lys	Ser	Thr	Ile	Ala	Lys	Leu	Met	Val	Gly	Ile	Glu
65					70					75					80
Glu	Pro	Ser	Glu	Gly	Gln	Ile	Leu	Phe	Gln	Asn	Leu	Pro	Val	Asp	Ser
			85						90					95	
Gln	Asn	Lys	Arg	Glu	Val	Arg	Lys	His	Ile	Gly	Ile	Val	Phe	Gln	Asn
			100					105					110		
Pro	Asp	Asn	Gln	Phe	Val	Gly	Ser	Ile	Val	Lys	Phe	Asp	Val	Ala	Phe
		115					120					125			
Gly	Leu	Glu	Asn	Gln	Leu	Val	Pro	Tyr	Lys	Glu	Met	Val	Ser	Lys	Val
	130					135					140				
Asn	Gln	Val	Leu	Thr	Glu	Val	Asp	Met	Ile	Asn	Lys	Ala	Asp	Asp	Glu
145					150					155					160
Pro	His	Ser	Leu	Ser	Gly	Gly	Gln	Lys	Gln	Arg	Val	Ala	Ile	Ala	Gly
			165						170					175	
Val	Leu	Ala	Leu	Asn	Pro	Asp	Val	Leu	Ile	Leu	Asp	Glu	Ala	Thr	Thr
			180					185					190		
Met	Leu	Asp	Pro	His	Gly	Lys	Ser	Ser	Leu	Leu	Asn	Leu	Val	Asn	Glu
		195					200					205			
Val	Lys	Val	Asn	Asn	His	Val	Thr	Ile	Ile	Ser	Ile	Thr	His	Asp	Leu
	210					215					220				
Asp	Glu	Ala	Met	His	Ala	Asp	Gln	Ile	Ile	Val	Leu	Asn	Lys	Gly	Thr
225					230					235					240
Val	Phe	Lys	Gln	Gly	Thr	Pro	Gln	Asp	Ile	Phe	Lys	Cys	Glu	Asp	Ala

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245 250 255
 Leu Ile Ser Val Gly Leu Asp Leu Pro Phe Pro Leu Lys Met Asn Arg
 260 265 270
 Leu Leu Gly Phe Asp Ser Thr Tyr Val Thr Tyr Glu Gly Leu Ile Lys
 275 280 285
 Lys Leu
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<400> 6395
 Ile Ile Thr Lys Thr Asn Thr Val Val Glu Lys Ile Val Asn Asn Arg
 1 5 10 15
 Ile Val Asn Phe Asp Phe Ile Ile Ser Pro Leu His Val Tyr Leu Leu
 20 25 30
 Ile Ile Leu Leu Leu Val Ile Asn Tyr Leu Ile Tyr Gly Ile Thr Leu
 35 40 45
 Lys

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<400> 6396
 Asn Cys Leu Lys Arg Ala Gly Ile Asn Ser Ile Gln Glu Leu Ala Asp
 1 5 10 15
 Lys Ser Glu Ala Asp Met Met Lys Val Arg Asn Leu Gly Arg Lys Ser
 20 25 30
 Leu Glu Glu Val Lys Tyr Lys Leu Glu Asp Leu Gly Leu Gly Leu Arg
 35 40 45
 Lys Glu Asp
 50

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 Asn Met Leu Lys Tyr Phe Tyr Lys Gly Glu Gln Asn Met Thr Gly Lys
 1 5 10 15
 Thr His Ala Ser Cys Gly Phe Leu Val Gly Ala Ile Thr Thr Gln Tyr
 20 25 30
 Phe His Thr Asp Ile Phe Thr Ser Ile Ser Val Ile Val Leu Ser Val
 35 40 45
 Ile Ser Ser Ile Leu Pro Asp Ile Cys His Thr Gln Ser Lys Ile Gly
 50 55 60
 Arg Arg Phe Arg Leu Thr Ser Phe Phe Val Arg Ile Leu Phe Gly His
 65 70 75 80
 Arg Thr Phe Thr His Ser Leu Leu Phe Ile Ile Gly Ile Ser Phe Leu
 85 90 95

50 55 60
 Ala Ser Ser Ile Leu Leu Asp Pro Glu Tyr Gly Leu Pro Ala Ser Asp
 65 70 75 80
 Ala Arg Asn Asn Asp Cys Gly Leu Leu Leu Ala Tyr Glu Lys Thr Gly
 85 90 95
 Tyr Asp Val Asn Ala Lys Gly Arg Leu Pro Asp Cys Leu Val Glu Trp
 100 105 110
 Ser Ala Lys Arg Leu Lys Glu Gln Gly Ala Asn Ala Val Lys Phe Leu
 115 120 125
 Leu Tyr Tyr Asp Val Asp Asp Thr Glu Glu Ile Asn Ile Gln Lys Lys
 130 135 140
 Ala Tyr Ile Glu Arg Ile Gly Ser Glu Cys Val Ala Glu Asp Ile Pro
 145 150 155 160
 Phe Phe Leu Glu Val Leu Thr Tyr Asp Asp Asn Ile Pro Asp Asn Lys
 165 170 175
 Ser Ala Glu Phe Ala Lys Val Lys Pro Arg Lys Val Asn Glu Ala Met
 180 185 190
 Lys Leu Phe Ser Glu Asp Arg Phe Asn Val Asp Val Leu Lys Val Glu
 195 200 205
 Val Pro Val Asn Met Asn Phe Val Glu Gly Phe Ser Glu Gly Glu Val
 210 215 220
 Val Tyr Thr Lys Glu Glu Ala Ala Gln His Phe Arg Asp Gln Asp Ala
 225 230 235 240
 Ala Thr His Leu Pro Tyr Ile Tyr Leu Ser Ala Gly Val Ser Ala Glu
 245 250 255
 Leu Phe Gln Asp Thr Leu Lys Phe Ala His Asp Ser Gly Ala Gln Phe
 260 265 270
 Asn Gly Val Leu Cys Gly Arg Ala Thr Trp Ser Gly Ala Val Lys Val
 275 280 285
 Tyr Ile Glu Glu Gly Glu Gln Ala Ala Arg Glu Trp Leu Arg Thr Val
 290 295 300
 Gly Phe Lys Asn Ile Asp Asp Leu Asn Thr Val Leu Lys Thr Thr Ala
 305 310 315 320
 Thr Ser Trp Lys Asn Lys
 325

<210> 6401

<211> 160

<212> PRT

<213> S.epidermidis

<400> 6401

Gly Arg Thr Lys Val Met Lys Phe Leu Lys Asn Lys Ser Tyr His Leu
 1 5 10 15
 Leu Val Thr Leu Ile Val Leu Thr Ile Phe Val Ile Ser Gly Ala Ile
 20 25 30
 Phe Leu Thr Phe Leu Gly Phe Gly Leu Tyr Gly Leu Ser Arg Ile Leu
 35 40 45
 Ile Tyr Leu His Leu Gly Asp Phe Ser Tyr Asn Lys Gly Phe Tyr Asp
 50 55 60
 Asn Leu Ile Tyr Tyr Gly Ser Tyr Ile Val Leu Gly Tyr Phe Thr Leu
 65 70 75 80
 Phe Ser Ile Glu His Leu Met Asp Tyr Phe Lys Lys Asn Leu Pro Lys
 85 90 95
 Asn Pro Tyr Phe Gln Gly Ile Asn Phe His Leu Ile Ser Tyr Ile Val
 100 105 110

Thr Thr Ile Met Phe Tyr Phe Ile Val His Ile His Tyr Val His Val
 115 120 125
 Asn Ile His Phe Trp Val Ile Met Ile Ile Ile Gly Phe Leu Phe Val
 130 135 140
 Cys Lys Glu Val Phe Tyr Pro Glu Ser Lys Asn Leu Asn Asn Lys Lys
 145 150 155 160

<210> 6402

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6402

Val Thr Ala Lys Pro Ser Phe Thr Ile Glu Pro Cys Gly Ser Ile Tyr
 1 5 10 15
 Tyr Pro Val Leu Ala Pro Val Ser Arg Ser Tyr Pro Ser Leu Ile Gly
 20 25 30
 Arg Leu Ser Thr Cys Tyr Ser Pro Val Arg Arg
 35 40

<210> 6403

<211> 591

<212> PRT

<213> S.epidermidis

<400> 6403

Ile Ile Gln Lys Arg Glu Leu Thr Pro Met Asn Lys Leu Ile Ala Trp
 1 5 10 15
 Ile Glu Lys Gly Lys Pro Phe Phe Glu Lys Ile Ser Arg Asn Ile Tyr
 20 25 30
 Leu Arg Ala Ile Arg Asp Gly Phe Ile Ala Ala Ile Pro Ile Ile Leu
 35 40 45
 Phe Ser Ser Ile Phe Ile Leu Ile Thr Tyr Val Pro Asn Val Phe Gly
 50 55 60
 Phe Thr Trp Ser Lys Thr Met Glu Gly Ile Leu Met Lys Pro Tyr Asn
 65 70 75 80
 Tyr Thr Met Gly Ile Val Gly Leu Leu Val Ala Gly Thr Thr Ala Lys
 85 90 95
 Ser Leu Thr Asp Ser Tyr Asn Arg Lys Leu Asp Lys Ala Asn Gln Ile
 100 105 110
 Asn Phe Ile Ser Thr Met Met Ala Ala Ile Cys Gly Phe Leu Phe Leu
 115 120 125
 Ala Ala Asp Pro Val Lys Asp Gly Gly Phe Ser Ser Ala Phe Met Gly
 130 135 140
 Thr Lys Gly Leu Leu Thr Ala Phe Ile Ser Ala Phe Ile Thr Val Ile
 145 150 155 160
 Val Tyr Asn Phe Phe Val Lys Arg Asn Ile Thr Ile Lys Met Pro Lys
 165 170 175
 Glu Val Pro Pro Asn Ile Ser Gln Val Phe Lys Asp Ile Phe Pro Leu
 180 185 190
 Ser Ala Val Ile Leu Ile Leu Tyr Ala Leu Asp Leu Leu Ser Arg Ala
 195 200 205
 Ile Val His Thr Asn Val Ala Asn Ala Val Leu Lys Val Phe Glu Pro
 210 215 220
 Leu Phe Thr Ala Ala Asp Gly Trp Ile Gly Val Thr Leu Ile Phe Gly
 225 230 235 240

	35					40				45									
Trp	Ser	Ser	Ala	Gly	Ala	Leu	Gly	Phe	Lys	Gly	Ser	Lys	Lys	Ser	Thr				
	50					55					60								
Pro	Phe	Ala	Ala	Gln	Met	Ala	Ser	Glu	Thr	Ala	Ser	Lys	Thr	Ala	Met				
65					70					75					80				
Glu	His	Gly	Leu	Lys	Thr	Val	Glu	Val	Thr	Val	Lys	Gly	Pro	Gly	Pro				
				85					90					95					
Gly	Arg	Glu	Ser	Ala	Ile	Arg	Ala	Leu	Gln	Ser	Ala	Gly	Leu	Glu	Val				
			100					105					110						
Thr	Ala	Ile	Lys	Asp	Val	Thr	Pro	Val	Pro	His	Asn	Gly	Cys	Arg	Pro				
		115					120					125							
Pro	Lys	Arg	Arg	Leu	Val														
	130																		

<210> 6405

<211> 459

<212> PRT

<213> S.epidermidis

<400> 6405

Ile	Tyr	Met	Asn	Gly	Phe	Lys	Lys	Val	Asp	Ile	Val	Arg	Gly	Arg	Ile				
1				5					10					15					
Lys	Phe	Ile	Thr	Met	Ser	Leu	Leu	Gly	Ile	Ile	Leu	Phe	Leu	Val	Pro				
			20					25					30						
Ile	Pro	Val	Val	Gln	Asp	Gly	Lys	Gln	Gln	Thr	Thr	Leu	Pro	Ile	Ala				
		35					40					45							
Phe	Leu	Ala	Gly	Leu	Leu	Lys	Asp	Trp	Leu	Gly	Gly	Ile	Met	Pro	Ile				
	50					55				60									
Leu	Ile	Val	Thr	Ile	Ile	Thr	Val	Ser	Gly	Ile	Leu	Thr	Ile	Leu	Cys				
65				70					75						80				
Ser	Thr	Ile	Tyr	Lys	Asn	Lys	Leu	Asn	Pro	Gln	Gly	Leu	Met	Ser	Ser				
				85					90					95					
Ala	Phe	Asn	Val	Lys	Ile	Gly	Trp	Leu	Val	Leu	Arg	Val	Leu	Ala	Val				
			100					105					110						
Phe	Phe	Ser	Trp	Leu	Thr	Phe	Leu	Asn	Ile	Gly	Pro	Glu	Met	Ile	Lys				
		115					120					125							
Ser	Glu	Asp	Thr	Gly	Gly	Leu	Val	Phe	Ser	Ser	Leu	Leu	Pro	Thr	Leu				
	130					135					140								
Val	Ala	Val	Phe	Leu	Phe	Ala	Ala	Ile	Phe	Leu	Pro	Leu	Leu	Met	Glu				
145				150					155					160					
Tyr	Gly	Leu	Leu	Glu	Leu	Leu	Gly	Pro	Ile	Phe	Arg	Pro	Ile	Met	Arg				
			165					170						175					
Pro	Leu	Phe	Thr	Leu	Pro	Gly	Arg	Ser	Thr	Val	Asp	Asn	Leu	Ala	Ser				
			180					185					190						
Phe	Ile	Gly	Asp	Gly	Thr	Val	Gly	Val	Leu	Ile	Thr	Ser	Arg	Gln	Tyr				
		195					200					205							
Gly	Glu	Gly	Tyr	Tyr	Ser	Arg	Arg	Glu	Ala	Thr	Val	Ile	Ser	Thr	Thr				
	210					215					220								
Phe	Ser	Val	Val	Ser	Ile	Thr	Phe	Ala	Ile	Val	Ile	Ala	Glu	Thr	Ile				
225				230					235					240					
Arg	Met	Gln	Asp	Gln	Phe	Phe	Tyr	Phe	Tyr	Leu	Thr	Val	Val	Ile	Ser				
				245				250						255					
Cys	Leu	Ile	Ala	Ala	Met	Ile	Met	Pro	Arg	Ile	Trp	Pro	Leu	Lys	Asn				
		260						265				270							
Ile	Pro	Asp	Glu	Tyr	Ala	Lys	Glu	Val	Ser	Glu	Glu	Ala	Arg	Asn	Glu				
		275					280					285							

Gln Leu Pro Glu Gly Lys Thr Ala Leu Lys Tyr Gly Phe Asp Leu Ala
 290 295 300
 Thr Glu Val Gly Ile Lys Ser Pro Gly Phe Lys Glu Phe Leu Ile Ser
 305 310 315 320
 Gly Phe Lys Thr Val Val Asp Met Trp Phe Val Ile Leu Pro Val Val
 325 330 335
 Met Ser Ile Gly Thr Ile Ala Thr Ile Ile Ala Asn Tyr Thr Pro Val
 340 345 350
 Phe Glu Ile Ile Gly Lys Pro Phe Val Pro Val Leu Glu Leu Leu Gln
 355 360 365
 Ile Pro Glu Ala His Glu Ala Ser Gln Thr Ile Leu Ile Gly Phe Ala
 370 375 380
 Asp Met Phe Leu Pro Ser Ile Leu Ile Glu Gly Val Gln Asn Asp Val
 385 390 395 400
 Thr Arg Phe Val Ile Gly Ala Leu Ser Ile Ser Gln Leu Val Tyr Leu
 405 410 415
 Ser Glu Val Gly Gly Val Ile Leu Gly Ser Lys Ile Pro Val Ser Ile
 420 425 430
 Ser Lys Leu Phe Met Ile Phe Leu Ile Arg Thr Ile Ile Thr Leu Pro
 435 440 445
 Ile Ile Ala Leu Leu Ala His Leu Phe Ile Gly
 450 455

<210> 6406

<211> 248

<212> PRT

<213> S.epidermidis

<400> 6406

Lys Gln Met Lys Lys Pro Asp Ile Gln Gln Leu Lys Asp Ile Val Asn
 1 5 10 15
 Asn Ser Asn Gln Ile Val Phe Phe Thr Gly Ala Gly Val Ser Val Ala
 20 25 30
 Ser Gly Ile Pro Asp Phe Arg Ser Met Gly Gly Leu Tyr Asp Glu Ile
 35 40 45
 Ser Lys Asp Gly Gln Ser Pro Glu Tyr Leu Leu Ser Ile Asp His Leu
 50 55 60
 His Asp Asn Lys Glu Ser Phe Ile Asn Phe Tyr His Glu Arg Leu Leu
 65 70 75 80
 Ile Ala Asp Lys Lys Pro Asn Ile Val His Gln Trp Ile Ala Gln Leu
 85 90 95
 Glu Asn Gln Gln Lys Ser Leu Gly Val Ile Thr Gln Asn Ile Asp Gly
 100 105 110
 Leu His Glu Asp Ala Gly Ser His Asn Ile Asp Glu Leu His Gly Thr
 115 120 125
 Leu Asn Arg Phe Tyr Cys Ile Asn Cys Tyr Glu Glu Tyr Ser Lys Ser
 130 135 140
 Tyr Val Met Thr His His Leu Lys Tyr Cys Glu Lys Cys Gly Asn Val
 145 150 155 160
 Ile Arg Pro Asp Ile Val Leu Tyr Gly Glu Met Leu Asn Gln Lys Thr
 165 170 175
 Val Phe Lys Ala Leu Asp Lys Ile Gln His Ala Asp Thr Leu Ile Val
 180 185 190
 Leu Gly Ser Ser Leu Val Val Gln Pro Ala Ala Gly Phe Val Ser Glu
 195 200 205
 Phe Lys Gly Asp Asn Leu Val Ile Ile Asn Arg Asp Ala Thr Pro Tyr

210 215 220
 Asp His Thr Ala Ser Leu Val Ile His Asp Asp Met Thr Asn Val Ile
 225 230 235 240
 Glu Glu Ile Leu Asn Ser Asn Ser
 245

<210> 6407
 <211> 354
 <212> PRT
 <213> S.epidermidis

<400> 6407
 Cys Met Ala Asn Val Arg Val Asn Leu Ser Lys Ile Lys Tyr Asn Ala
 1 5 10 15
 Lys Val Leu Gln Ser Leu Leu Glu Arg Arg His Ile His Phe Thr Pro
 20 25 30
 Val Ile Lys Cys Val Ala Gly Asp Lys Arg Ile Val Ser Ser Ile Lys
 35 40 45
 Ser Leu Gly Ile Thr His Phe Ala Glu Ser Arg Leu Asp Asn Ile Glu
 50 55 60
 Gln Leu Lys Asp Leu Asp Ile Thr Phe Thr Leu Leu Arg Pro Thr Val
 65 70 75 80
 Glu Ala Asp Leu Glu Lys Met Ile Ser Arg Val Glu Met Ser Ile Gln
 85 90 95
 Thr Glu Leu Thr Thr Ile Lys Lys Leu Asn Thr Leu Ala Lys Ser Leu
 100 105 110
 Asp Ile Lys His Gln Ile Met Leu Met Val Asp Trp Lys Asp Gly Arg
 115 120 125
 Glu Gly Val Leu Thr Tyr Asp Val Val Arg Tyr Val Gln Glu Val Leu
 130 135 140
 Arg Leu Ser His Ile Gln Leu Val Gly Leu Ala Phe Asn Phe Met Cys
 145 150 155 160
 Phe Lys Ser Glu Ala Pro Asn Glu Lys Asp Val Arg Met Ile Asn Lys
 165 170 175
 Phe Ile His Asn Val Glu Asn Glu Thr His Phe Lys Phe Arg Ile Ile
 180 185 190
 Ser Gly Gly Asn Ser Ser Met Leu Pro Gln Thr Leu Tyr Asn His Leu
 195 200 205
 Asp Lys Ile Asn Asp Leu Arg Ile Gly Glu Ala Leu Leu Arg Gly Ile
 210 215 220
 Asp Thr Thr Thr Asn His Ser Ile Asn Ser Leu Tyr Gln Asn Ala Ile
 225 230 235 240
 Val Leu Glu Ala Glu Ile Ile Glu Ile Lys Pro Arg Leu Tyr Gln Lys
 245 250 255
 Asn Asn Gln Ser Tyr Leu Gln Ala Ile Val Asp Ile Gly Tyr Leu Asp
 260 265 270
 Thr Phe Ile Glu Gly Ile Lys Pro Leu Gly Asn Asp Ile Arg Ile Leu
 275 280 285
 Gly Ala Ser Ser Asp His Leu Met Ile Asp Leu Asn Asn Gln Asp His
 290 295 300
 Tyr Gln Ile Gly Asp Lys Leu Gln Phe Ser Leu Asn Tyr Glu Ala Leu
 305 310 315 320
 Ser Gln Ser Met Tyr Met Lys Asn Leu Thr Lys Leu Tyr Ser Ser Asp
 325 330 335
 Ser Lys Ile Glu Ser Leu Val Gln Asn Phe Asp Met Pro Ile Tyr Ser
 340 345 350

Gln Cys

<210> 6408
 <211> 78
 <212> PRT
 <213> S.epidermidis

<400> 6408
 Asn Val Lys Asn Trp Val Val Lys Gln Met Lys Ala Lys Glu Ile Arg
 1 5 10 15
 Asp Leu Thr Thr Ser Glu Ile Glu Glu Ile Lys Ser Ser Lys Glu
 20 25 30
 Glu Leu Phe Asn Leu Arg Phe Gln Leu Ala Thr Gly Gln Leu Glu Glu
 35 40 45
 Thr Ala Arg Ile Arg Thr Val Arg Lys Thr Ile Ala Arg Leu Lys Thr
 50 55 60
 Val Ala Arg Glu Arg Glu Ile Glu Gln Ser Lys Ala Asn Gln
 65 70 75

<210> 6409
 <211> 348
 <212> PRT
 <213> S.epidermidis

<400> 6409
 Val Arg Trp Lys Thr Met Thr Met Val Asn Lys Asp Ser Gln Ser Ala
 1 5 10 15
 Ile Glu Gln Lys Lys Lys Arg Thr Thr Leu Thr Phe Ile Val Gly
 20 25 30
 Val Cys Leu Leu Phe Ile Ser Val Tyr Leu Asn Leu Ala Ile Gly Ser
 35 40 45
 Ser Lys Ile Gln Phe Asn Asp Ile Leu Ser Tyr Val Thr Gly His Thr
 50 55 60
 Asn Thr Lys Ala Thr Phe Leu Ile His Asn Val Arg Met Pro Arg Met
 65 70 75 80
 Leu Ala Gly Leu Ile Ile Gly Gly Ala Leu Ala Ile Ala Gly Leu Leu
 85 90 95
 Met Gln Ala Ile Thr Lys Asn Pro Leu Ala Ser Pro Gln Ile Phe Gly
 100 105 110
 Val Asn Ala Gly Ala Ser Phe Val Ile Val Leu Ile Thr Val Leu Ile
 115 120 125
 Pro Ser Leu Gly Ser Tyr Ser Thr Ile Leu Ala Ile Ile Gly Ala Phe
 130 135 140
 Leu Gly Gly Phe Thr Val Tyr Thr Leu Ser Gly Ser Thr Lys Ser Ile
 145 150 155 160
 Thr Pro Ile Lys Leu Ala Leu Ala Gly Met Ala Ile His Leu Phe Phe
 165 170 175
 Ser Ser Met Thr Gln Gly Ile Ile Ile Leu Asn Glu Asp Ser Asn Asp
 180 185 190
 Thr Val Met Phe Trp Leu Val Gly Ser Leu Ala Gly Ile Lys Trp Gln
 195 200 205
 Gln Ile Ile Phe Ile Leu Pro Phe Leu Leu Leu Ala Ile Phe Val Thr
 210 215 220
 Ile Phe Met Gly Arg Gln Leu Thr Ile Leu Glu Leu Gly Asp Asp Ile
 225 230 235 240

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Ala Arg Gly Leu Gly Gln Arg Thr Glu Ile Val Arg Met Ile Val Gly
 245 250 255
 Ile Leu Val Val Val Leu Ala Gly Val Ser Val Ser Ile Ala Gly Pro
 260 265 270
 Ile Gly Phe Val Gly Leu Ile Val Pro His Ile Val Lys Arg Tyr Ile
 275 280 285
 Asn Lys Asn Tyr Val Leu Met Ile Pro Leu Thr Phe Ile Phe Gly Ala
 290 295 300
 Thr Leu Leu Leu Ile Ser Asp Val Leu Cys Arg Leu Ile Thr Tyr Pro
 305 310 315 320
 Phe Glu Ser Pro Val Gly Ile Val Thr Ser Phe Val Gly Ala Phe Tyr
 325 330 335
 Phe Leu Phe Ile Thr Val Arg Gly Val Asn Arg Ile
 340 345

<210> 6410

<211> 150

<212> PRT

<213> S.epidermidis

<400> 6410

Gly Gly Ala Glu Met Lys Leu His Glu Leu Lys Ala Ala Glu Gly Ser
 1 5 10 15
 Arg Arg Val Arg Asn Arg Val Gly Arg Gly Ala Ala Thr Gly Asn Gly
 20 25 30
 Lys Thr Ser Gly Arg Gly Gln Lys Gly Gln Lys Ala Arg Ser Gly Gly
 35 40 45
 Lys Val Arg Pro Gly Phe Glu Gly Gly Gln Leu Pro Leu Phe Arg Arg
 50 55 60
 Leu Pro Lys Arg Gly Phe Thr Asn Ile Asn Arg Lys Glu Tyr Ala Ile
 65 70 75 80
 Val Asn Leu Asp Gln Leu Asn Lys Phe Glu Asp Gly Thr Glu Val Thr
 85 90 95
 Pro Ala Leu Leu Val Glu Ser Gly Val Val Lys Asn Glu Lys Ser Gly
 100 105 110
 Ile Lys Val Leu Gly Asn Gly Ser Leu Asp Lys Lys Leu Thr Val Lys
 115 120 125
 Ala His Lys Phe Ser Ala Ser Ala Ala Glu Ala Ile Asp Ala Lys Gly
 130 135 140
 Gly Ala His Glu Val Ile
 145 150

<210> 6411

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6411

Leu Arg Ile Glu Cys Pro Thr Thr Pro Thr Ser Lys Leu Val Gly Leu
 1 5 10 15
 Gly Phe Ser Arg Phe Ala Arg Arg Tyr Ser Gly Asn Arg Phe Phe Phe
 20 25 30
 Leu Phe Leu Arg Val Leu Arg Cys Phe Ser Ser Pro Gly Leu Pro Ser
 35 40 45
 Asp Met Leu
 50

<210> 6412
 <211> 128
 <212> PRT
 <213> S.epidermidis

<400> 6412
 His Ser Lys Glu Arg Ser Ile Glu Met Ile Ser Lys Ile Asp Lys Asn
 1 5 10 15
 Lys Val Arg Leu Lys Arg Arg Ala Arg Val Arg Thr Lys Leu Ser Gly
 20 25 30
 Thr Ala Glu Lys Pro Arg Leu Asn Val Tyr Arg Ser Asn Lys His Ile
 35 40 45
 Tyr Ala Gln Ile Ile Asp Asp Val Lys Gly Val Thr Leu Ala Gln Ala
 50 55 60
 Ser Ser Gln Asp Lys Asp Ile Ala Asn Thr Ser Ala Ser Lys Val Asp
 65 70 75 80
 Leu Ala Thr Thr Val Gly Gln Ala Ile Ala Lys Lys Ala Asn Asp Lys
 85 90 95
 Gly Ile Lys Glu Ile Val Phe Asp Arg Gly Gly Tyr Leu Tyr His Gly
 100 105 110
 Arg Val Lys Ala Leu Ala Asp Ala Ala Arg Glu Asn Gly Leu Glu Phe
 115 120 125

<210> 6413
 <211> 94
 <212> PRT
 <213> S.epidermidis

<400> 6413
 Leu Lys Glu Glu Val Thr Lys Val Ser Glu Arg Asn Asp Arg Lys Val
 1 5 10 15
 Tyr Val Gly Arg Val Val Ser Asp Lys Met Asp Lys Thr Ile Thr Val
 20 25 30
 Leu Val Glu Thr Tyr Lys Thr His Lys Leu Tyr Gly Lys Arg Val Lys
 35 40 45
 Tyr Ser Lys Lys Tyr Lys Thr His Asp Glu Asn Asn Ser Ala Lys Leu
 50 55 60
 Gly Asp Ile Val Lys Ile Gln Glu Thr Arg Pro Leu Ser Ala Thr Lys
 65 70 75 80
 Arg Phe Arg Leu Val Glu Ile Val Glu Glu Ser Val Ile Ile
 85 90

<210> 6414
 <211> 123
 <212> PRT
 <213> S.epidermidis

<400> 6414
 Val Glu Glu Glu Ile Leu Met Glu Ala Lys Ala Val Ala Arg Thr Ile
 1 5 10 15
 Arg Ile Ala Pro Arg Lys Val Arg Leu Val Leu Asp Leu Ile Arg Gly
 20 25 30
 Lys Asn Ala Gly Glu Ala Ile Ala Ile Leu Lys Leu Thr Asn Lys Ala
 35 40 45
 Ser Ser Pro Val Ile Glu Lys Val Leu Met Ser Ala Leu Ala Asn Ala

Met Asp Leu Ile His Thr Pro Tyr His Val Lys Leu Pro Val Asn Val
 325 330 335
 Gln Ala Thr Ser Ala Val Arg Thr Val Ser Ser Val Thr Thr Val Asp
 340 345 350
 Gly Pro Lys Leu Ser His Ala Leu Gln Gly Leu Leu Gln Glu Phe Pro
 355 360 365
 Glu Leu Gln Val Ala Met Glu Pro Tyr Gly Ala Tyr Ala His Thr Ala
 370 375 380
 Ser Asp Leu Ser Lys Gln Leu Ala Leu Ile Ile Arg Gln Lys Pro Thr
 385 390 395 400
 Ile Tyr Asp Tyr Gly Cys Thr Val Val Thr Ala Ser Leu Val Asn Pro
 405 410 415
 Asn Pro Ile Asp Asn Gln Ala Val Val Asp Ser Tyr Leu Lys Trp Ile
 420 425 430
 Glu Asn Glu Ile Thr Leu Asp His Ile Lys His Phe Ile Ala Ile Tyr
 435 440 445
 Thr Gln Thr Leu Val Thr Pro Leu Ile Ala Tyr Ile Gln Asn Tyr Gly
 450 455 460
 Ile Ala Leu Glu Ala His Met Gln Asn Thr Ile Val Asn Leu Gly Pro
 465 470 475 480
 Asn Tyr Lys Met Lys Phe Ile Val Arg Asp Leu Gly Gly Ser Arg Ile
 485 490 495
 Asp Leu Asn Thr Leu Lys Gln Lys Val Pro Gln Ile Asp Val Thr Asn
 500 505 510
 Glu Ser Leu Ile Ala Asp Thr Ile Glu Glu Val Ile Ala Lys Phe Gln
 515 520 525
 His Ala Val Ile Gln Asn Gln Leu Ala Glu Leu Ile His His Phe Asn
 530 535 540
 Gln Tyr Asp Glu Val Ile Glu Glu Glu Leu Phe Glu Ile Val Arg Glu
 545 550 555 560
 Glu Ile Glu Met Ala Ile Asp Asn Asp Lys Pro His Ala Glu Lys Leu
 565 570 575
 Lys Lys Ile Leu Phe Gly Ser Thr Ile Thr Val Lys Ala Leu Leu Ser
 580 585 590
 Met Arg Met Glu Asn Lys Val Lys Lys Tyr Leu Asn Thr Lys Leu Asp
 595 600 605
 Asn Pro Ile Lys Lys Glu Val
 610 615

<210> 6416

<211> 450

<212> PRT

<213> S.epidermidis

<400> 6416

Lys Gly Ser Phe Phe Met Asn Leu Lys Ser Ile Ile Thr Val Met Ala
 1 5 10 15
 Leu Ile Leu Ile Met Phe Met Ala Ala Ile Glu Thr Ser Ile Ile Ser
 20 25 30
 Leu Ala Leu Pro Thr Ile Lys Asn Ser Leu Asn Ala Gly Asn Leu Val
 35 40 45
 Ser Leu Val Phe Thr Val Tyr Phe Ile Ala Leu Val Ile Ala Asn Pro
 50 55 60
 Ile Val Gly Glu Leu Met Ser Arg Phe Lys Ile Ile Tyr Ile Ala Val
 65 70 75 80
 Val Gly Val Leu Leu Phe Ala Leu Gly Ser Leu Met Ser Gly Leu Ser

85 90 95
 Gln Thr Phe Thr Phe Leu Ile Ile Ser Arg Thr Val Gln Gly Phe Gly
 100 105 110
 Ala Gly Val Met Met Ser Leu Ser Gln Ile Val Pro Lys Leu Ala Phe
 115 120 125
 Glu Ile Pro Leu Arg Tyr Lys Ile Met Gly Ile Val Gly Ser Val Trp
 130 135 140
 Gly Ile Ser Ser Ile Ile Gly Pro Leu Leu Gly Gly Ala Ile Leu Glu
 145 150 155 160
 Phe Ala Ser Trp His Trp Leu Phe Tyr Ile Asn Ile Pro Ile Ala Ile
 165 170 175
 Val Ala Ile Ile Leu Val Leu Met Thr Phe His Phe Pro Asp Glu Thr
 180 185 190
 Gln Val Gln Gln Ser Arg Phe Asp Ile Lys Gly Leu Ile Ile Phe Tyr
 195 200 205
 Ile Phe Ile Ala Leu Leu Met Phe Gly Leu Leu Asn Gln His His Ile
 210 215 220
 Ile Phe Asn Ile Phe Ser Ile Ile Leu Ala Leu Ala Val Leu Trp Leu
 225 230 235 240
 Leu Phe Lys Ile Glu Asn Ser Ile Glu Gln Pro Phe Leu Pro Thr Lys
 245 250 255
 Glu Phe Asn Ile Ser Ile Val Leu Val Phe Ile Thr Asp Leu Leu Ile
 260 265 270
 Ala Ile Thr Leu Met Gly Tyr Asn Leu Tyr Ile Pro Val Tyr Leu Gln
 275 280 285
 Glu Lys Leu Ser Leu Ser Pro Leu Gln Ser Gly Phe Val Ile Phe Pro
 290 295 300
 Leu Ser Val Ala Trp Ile Thr Leu Asn Phe Asn Leu Gly Lys Ile Glu
 305 310 315 320
 Ala His Phe Thr Arg Lys Thr Leu Tyr Ile Cys Ser Phe Phe Val Leu
 325 330 335
 Leu Val Ser Ser Leu Met Ile Met Phe Gly Leu Lys Leu Pro Leu Leu
 340 345 350
 Ile Ala Phe Ala Val Val Phe Ala Gly Leu Ser Phe Gly Tyr Ile Tyr
 355 360 365
 Thr Lys Asp Ser Val Ile Val Gln Glu Glu Thr Ser Pro Lys Asn Met
 370 375 380
 Lys Lys Met Met Ser Phe Tyr Ala Leu Thr Lys Asn Leu Gly Ser Ser
 385 390 395 400
 Val Gly Ser Thr Ile Met Gly Tyr Met Tyr Ala Leu Asn Val Gly Leu
 405 410 415
 Phe Gly Ser Asn Leu His Asn Val Leu Gly Leu Val Leu Ile Ile Ala
 420 425 430
 Val Cys Leu Ile Val Met Trp Met Thr Leu Tyr Lys Ser Asn Thr Ile
 435 440 445
 Gln Ser
 450

<210> 6417

<211> 74

<212> PRT

<213> S.epidermidis

<400> 6417

Ala His Gly Phe Lys Phe Ser Phe Thr Pro Leu Pro Gly Tyr Phe Ser
 1 5 10 15

Pro Phe Pro His Gly Thr Gly Ser Leu Ser Val Thr Arg Glu Tyr Leu
 20 25 30
 Ala Leu Gly Asp Gly Pro Pro Arg Phe Arg Arg Asn Phe Thr Cys Ser
 35 40 45
 Val Val Leu Arg Ile His Ser Arg Glu Asn Met Phe Ser Thr Thr Gly
 50 55 60
 Leu Leu Pro Ser Leu Ile His Leu Ser Arg
 65 70

<210> 6418

<211> 45

<212> PRT

<213> S.epidermidis

<400> 6418

Pro Cys Leu Cys Leu Cys Phe Gly Leu Ser Gln Ile Thr Ile Thr Leu
 1 5 10 15
 Pro Leu Arg Leu Met Thr Leu His Phe Ser His Ile Gly Phe Thr Asp
 20 25 30
 Gly Leu Thr Phe Ile Phe Ile Pro Pro Tyr Ile Met Glu
 35 40 45

<210> 6419

<211> 112

<212> PRT

<213> S.epidermidis

<400> 6419

Lys Leu Ile Trp Val Cys Gly Val Lys Leu His Ala His Asn Lys Lys
 1 5 10 15
 Gly Gly Ala Gln Met Ala Arg Ser Ile Lys Lys Gly Pro Phe Val Asp
 20 25 30
 Asp His Leu Met Lys Lys Val Glu Ala Gln Asp Gly Ser Glu Lys Lys
 35 40 45
 Gln Val Ile Lys Thr Trp Ser Arg Arg Ser Thr Ile Phe Pro Asn Phe
 50 55 60
 Ile Gly His Thr Phe Ala Val Tyr Asp Gly Arg Lys His Val Pro Val
 65 70 75 80
 Tyr Val Thr Glu Asp Met Val Gly His Lys Leu Gly Glu Phe Ala Pro
 85 90 95
 Thr Arg Thr Phe Lys Gly His Ala Ala Asp Asp Lys Lys Thr Arg Arg
 100 105 110

<210> 6420

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6420

Leu Phe Ser Trp Met Gly Tyr Ser Glu Leu Asp Asn Ile Cys Met Trp
 1 5 10 15
 Gln Thr Leu Ser Leu His Ser Phe Ala Leu Tyr Ile Ser Ser Lys Cys
 20 25 30
 Val Phe Ile Lys Val Arg Gln Leu Ser Tyr Asn Leu Cys Leu Lys Ile
 35 40 45
 Arg Leu Asn

50

<210> 6421

<211> 440

<212> PRT

<213> S.epidermidis

<400> 6421

Cys	Lys	Arg	Trp	Ser	Thr	Arg	Gly	Asp	Leu	Met	Phe	Gln	Thr	Phe	Val
1				5					10					15	
Arg	Phe	Phe	Thr	Thr	Lys	Glu	Val	Arg	Asn	Lys	Ile	Phe	Phe	Thr	Leu
			20					25					30		
Ala	Met	Leu	Val	Ile	Phe	Lys	Ile	Gly	Thr	Tyr	Ile	Pro	Ala	Pro	Gly
		35					40					45			
Val	Asn	Pro	Glu	Ala	Phe	Asn	His	Pro	Gln	Gly	Ser	Gln	Gly	Ala	Thr
	50					55					60				
Glu	Leu	Leu	Asn	Thr	Phe	Gly	Gly	Gly	Ala	Leu	Lys	Arg	Phe	Ser	Ile
65					70					75					80
Phe	Ala	Met	Gly	Ile	Met	Pro	Tyr	Ile	Thr	Ala	Ser	Ile	Val	Met	Gln
				85					90					95	
Leu	Leu	Gln	Met	Asp	Ile	Val	Pro	Lys	Phe	Thr	Glu	Trp	Ala	Lys	Gln
			100					105					110		
Gly	Glu	Met	Gly	Arg	Arg	Lys	Ile	Asn	Asn	Val	Thr	Arg	Tyr	Phe	Ala
		115					120					125			
Ile	Ile	Leu	Ala	Phe	Ile	Gln	Ser	Ile	Gly	Met	Ala	Phe	Gln	Phe	Asn
	130					135					140				
Asn	Tyr	Leu	Lys	Gly	Gln	Leu	Ile	Ile	Glu	Lys	Ser	Val	Met	Ser	Tyr
145					150					155					160
Leu	Leu	Ile	Ala	Val	Val	Leu	Thr	Ala	Gly	Thr	Ala	Phe	Leu	Ile	Trp
				165					170					175	
Leu	Gly	Asp	Gln	Ile	Thr	Gln	Phe	Gly	Val	Gly	Asn	Gly	Ile	Ser	Leu
			180					185					190		
Ile	Ile	Phe	Ala	Gly	Ile	Leu	Ser	Thr	Leu	Pro	Ser	Ser	Leu	Glu	Gln
		195					200					205			
Phe	Ala	Gln	Ser	Val	Phe	Val	Gly	Gln	Asp	Asp	Thr	Ser	Leu	Ala	Trp
	210					215					220				
Leu	Lys	Ile	Leu	Gly	Leu	Ile	Val	Ala	Leu	Ile	Leu	Leu	Thr	Val	Gly
225					230					235					240
Ala	Ile	Phe	Val	Leu	Glu	Ala	Lys	Arg	Lys	Ile	Pro	Ile	Gln	Tyr	Ala
				245					250					255	
Lys	Lys	Gln	Ser	Ala	Gln	Arg	Leu	Gly	Ser	Gln	Ala	Thr	Tyr	Leu	Pro
			260					265					270		
Leu	Lys	Val	Asn	Ser	Ala	Gly	Val	Ile	Pro	Val	Ile	Phe	Ala	Met	Ala
		275					280					285			
Phe	Phe	Leu	Leu	Pro	Arg	Thr	Leu	Thr	Leu	Phe	Phe	Pro	Lys	Ala	Glu
	290					295					300				
Trp	Ala	Gln	Asn	Ile	Ala	Asp	Thr	Ala	Asn	Pro	Ser	Ser	Asn	Ile	Gly
305					310					315					320
Met	Ile	Ile	Tyr	Val	Val	Leu	Ile	Ile	Ala	Phe	Ala	Tyr	Phe	Tyr	Ala
				325					330					335	
Phe	Val	Gln	Val	Asn	Pro	Glu	Lys	Met	Ala	Asp	Asn	Leu	Lys	Lys	Gln
			340					345					350		
Gly	Ser	Tyr	Val	Pro	Gly	Ile	Arg	Pro	Gly	Glu	Gln	Thr	Lys	Lys	Tyr
		355					360					365			
Ile	Thr	Lys	Val	Leu	Tyr	Arg	Leu	Thr	Phe	Val	Gly	Ser	Ile	Phe	Leu
	370					375					380				

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Ala Ala Ile Ala Ile Leu Pro Ile Ile Ala Thr Lys Phe Met Gly Leu
 385 390 395 400
 Pro Gln Ser Ile Gln Ile Gly Gly Thr Ser Leu Leu Ile Val Ile Gly
 405 410 415
 Val Ala Ile Glu Thr Met Lys Thr Leu Glu Ala Gln Val Thr Gln Lys
 420 425 430
 Glu Tyr Lys Gly Phe Gly Gly Arg
 435 440

<210> 6422
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 <212> PRT
 <213> S.epidermidis

<400> 6422
 Ile Val Leu Leu Leu Tyr Asn Val Ile His Ile Thr Ile Lys His Thr
 1 5 10 15
 Ala Ile Ile Lys Thr Asn Pro Asn Thr Leu Cys Lys Leu Glu Pro Asn
 20 25 30
 Lys Pro Thr Phe Ser Ala Tyr Ile
 35 40

<210> 6423
 <211> 96
 <212> PRT
 <213> S.epidermidis

<400> 6423
 Gly Gly Ala Arg Ile Met Glu Ala Arg Asp Val Leu Lys Arg Pro Val
 1 5 10 15
 Ile Thr Glu Lys Ser Ser Glu Ala Met Ala Glu Asp Lys Tyr Thr Phe
 20 25 30
 Asp Val Asp Thr Arg Ala Asn Lys Thr Gln Val Lys Ile Ala Val Glu
 35 40 45
 Glu Ile Phe Asp Val Lys Val Asp Ser Val Asn Ile Ile Asn Tyr Lys
 50 55 60
 Pro Lys Lys Lys Arg Met Gly Arg Tyr Gln Gly Tyr Thr Asn Lys Arg
 65 70 75 80
 Arg Lys Ala Ile Val Lys Leu Lys Glu Gly Ser Ile Asp Leu Phe Asn
 85 90 95

<210> 6424
 <211> 121
 <212> PRT
 <213> S.epidermidis

<400> 6424
 Lys Gln Gln Leu His His Gly Lys Thr Asn Asn Val Arg Glu Asp Ile
 1 5 10 15
 Gln Met Asn Arg Asp Glu Val Gln Leu Leu Gly Phe Glu Ile Val Ala
 20 25 30
 Tyr Ala Gly Asp Ala Arg Ser Lys Leu Leu Glu Ala Leu Asn Ala Ala
 35 40 45
 Lys Asp Ser Glu Phe Asp Lys Ala Glu Gln Leu Val Glu Glu Ala Asn
 50 55 60
 Glu Cys Ile Ala Asn Ala His Lys Ala Gln Thr Asn Leu Leu Ala Gln

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<210> 6425
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<212> PRT
<213> S.epidermidis
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<210> 6426
<211> 59
<212> PRT
<213> S.epidermidis
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<400> 6426

Ser	Ala	Arg	Arg	Arg	Phe	Phe	Lys	Ser	Asp	Val	Lys	Ala	His	Gly	Ser
1				5					10					15	
Thr	Val	Glu	Gly	His	Trp	Lys	Leu	Glu	Asn	Leu	Ser	Ala	Glu	Glu	Glu
			20					25					30		
Ser	Gly	Ile	Pro	Cys	Val	Ala	Val	Lys	Cys	Ala	Glu	Ile	Trp	Arg	Asn
		35					40					45			
Thr	Ser	Gly	Glu	Gly	Asp	Phe	Leu	Val	Cys	Asn					

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<210> 6427

<211> 275

<212> PRT

<213> S.epidermidis

<400> 6427

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Ser Cys Ile Arg Ser Gly Ile Met Lys Asn Lys Leu Ile Ile Gly Arg
1      5      10      15
Tyr Leu Pro Met Gln Ser Ile Ile His Gln Leu Asp Pro Arg Ala Lys
      20      25      30
Leu Ile Phe Val Phe Phe Phe Ile Leu Ile Phe Phe Cys His Ser
      35      40      45
Leu Gly Thr Tyr Ala Trp Leu Phe Leu Phe Ile Ile Leu Phe Ile Lys
      50      55      60
Leu Ala Arg Ile Pro Phe Trp Phe Leu Ile Lys Gly Leu Thr Pro Ile
65      70      75      80
Phe Phe Phe Leu Val Phe Thr Phe Ser Met His Val Leu Phe Thr Asn
      85      90      95
Gly Gly Ile Val Leu Phe Gln Trp Lys Phe Ile Thr Ile Glu Ser Ser
      100      105      110
Gly Val Met Glu Gly Ile Tyr Ile Ser Leu Arg Leu Ile Phe Ile Val
      115      120      125
Met Ile Ala Thr Ile Met Thr Leu Ser Thr Ser Pro Ile Asp Leu Thr
      130      135      140
Asp Ala Phe Glu Lys Leu Phe Ala Pro Leu Lys Val Ile Lys Val Pro
145      150      155      160
Val His Gln Leu Ser Met Met Met Ser Ile Ala Leu Arg Phe Ile Pro
      165      170      175
Thr Leu Met Asp Glu Leu Glu Lys Ile Ile Leu Ala Gln Lys Ser Arg
      180      185      190
Gly Ser Glu Ile Ser Ser Gly Ser Leu Ile Thr Arg Ile Arg Ala Phe
      195      200      205
Ile Pro Ile Met Ile Pro Leu Phe Ile Ser Ala Phe Gln Arg Ala Glu
      210      215      220
Glu Leu Ala Ile Ala Met Glu Val Arg Gly Tyr Asp Ile Asn Ile Lys
225      230      235      240
Arg Thr Ser Tyr Arg Leu Leu His Trp Gln Tyr Lys Asp Thr Leu Thr
      245      250      255
Val Leu Leu Leu Ile Pro Ile Ala Thr Ile Leu Phe Ile Leu Lys Phe
      260      265      270
Ser Gly Val
      275

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<210> 6428

<211> 140

<212> PRT

<213> S.epidermidis

<400> 6428

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Glu Ser Glu Arg Arg Gln Gln Ser Met Thr Met Thr Asp Pro Ile Ala
1      5      10      15
Asp Met Leu Thr Arg Val Arg Asn Ala Asn Met Val Arg His Glu Lys
      20      25      30
Leu Glu Leu Pro Ala Ser Asn Ile Lys Lys Glu Ile Ala Glu Ile Leu

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<210> 6429
<211> 288
<212> PRT
<213> S.epidermidis
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<400>	6429														
Lys	Ile	Met	Ser	Ile	Gln	Phe	Asn	Gln	Val	Ser	Tyr	Ile	Tyr	Gln	Gln
1				5					10					15	
Gly	Thr	Pro	Tyr	Glu	Phe	Glu	Ala	Ile	Lys	Asn	Val	Ser	Leu	Thr	Leu
			20					25					30		
Glu	Gln	Gly	Lys	Tyr	Tyr	Ala	Ile	Ile	Gly	Gln	Thr	Gly	Ser	Gly	Lys
		35				40						45			
Ser	Thr	Leu	Ile	Gln	His	Leu	Asn	Ala	Leu	Leu	Lys	Pro	Thr	Thr	Gly
	50					55					60				
Ser	Val	Asn	Ile	Asn	Gly	Leu	Glu	Val	Thr	Asn	Lys	Thr	Lys	Asp	Lys
65					70					75				80	
His	Leu	Arg	His	Ile	Arg	Lys	Glu	Val	Gly	Val	Val	Phe	Gln	Phe	Pro
				85					90					95	
Glu	Ser	Gln	Leu	Phe	Glu	Asp	Ser	Val	Glu	Lys	Glu	Ile	Glu	Phe	Gly
			100					105					110		
Pro	Lys	Asn	Phe	Asn	Met	Asn	Leu	Lys	Asn	Val	Lys	Asp	Lys	Ala	Phe
		115					120					125			
Gln	Leu	Leu	Leu	Glu	Leu	Gly	Phe	Ser	Arg	Asn	Val	Met	Ser	Ser	Ser
	130					135					140				
Pro	Phe	Gln	Met	Ser	Gly	Gly	Gln	Met	Arg	Lys	Ile	Ala	Ile	Val	Ser
145					150					155				160	
Ile	Leu	Ala	Met	Asp	Pro	Gln	Val	Ile	Ile	Leu	Asp	Glu	Pro	Thr	Ala
				165					170					175	
Gly	Leu	Asp	Pro	Asn	Ser	Lys	His	Gln	Val	Met	Ser	Leu	Ile	Lys	Lys
			180					185					190		
Ile	Gln	Ile	Glu	Glu	Asn	Lys	Thr	Ile	Ile	Leu	Val	Ser	His	Asp	Met
		195					200					205			
Asp	Asp	Val	Ala	Arg	Tyr	Ser	Asp	Glu	Val	Val	Val	Met	Asn	Lys	Gly
	210					215					220				
Thr	Ile	Val	Glu	Lys	Ser	Asn	Pro	Arg	Asn	Leu	Phe	Asn	Gln	Lys	Thr
225					230					235				240	
Gln	Leu	Leu	Lys	Trp	His	Ile	Glu	Leu	Pro	Lys	Val	Val	Lys	Leu	Gln
				245					250					255	
Lys	Asp	Ile	Glu	Lys	Lys	Tyr	Asn	Met	Leu	Phe	Pro	Lys	Leu	Ala	Thr
		260						265					270		
Asn	Glu	Glu	Glu	Phe	Val	Lys	Leu	Tyr	Lys	Glu	Trp	His	His	Glu	Glu
		275					280						285		

<210> 6430
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6430
 Asn Ala Gln Arg Tyr Gly Gly Thr Pro Val Ala Lys Ala Thr Phe Trp
 1 5 10 15
 Ser Val Thr Asp Ala Asp Val Arg Lys Arg Gly Asp Gln Thr Gly Leu
 20 25 30
 Asp Thr Leu Val Val His Ala Val Asn Asp Glu Cys
 35 40

<210> 6431
 <211> 185
 <212> PRT
 <213> S.epidermidis

<400> 6431
 Ile Ile Arg Arg Cys His Asn Met Ser Arg Val Gly Lys Lys Ile Ile
 1 5 10 15
 Asp Ile Pro Ser Asp Val Thr Val Thr Phe Asp Gly Ser His Val Thr
 20 25 30
 Val Lys Gly Pro Lys Gly Glu Leu Glu Arg Thr Leu Asn Glu Arg Met
 35 40 45
 Thr Phe Lys Gln Glu Glu Asn Thr Val Glu Val Val Arg Pro Ser Asp
 50 55 60
 Ser Lys Glu Asp Arg Thr Asp His Gly Thr Thr Arg Ala Leu Leu Asn
 65 70 75 80
 Asn Met Val Leu Gly Val Ser Gln Gly Tyr Glu Lys Thr Leu Glu Leu
 85 90 95
 Val Gly Val Gly Tyr Arg Ala Gln Met Gln Gly Lys Asp Leu Val Leu
 100 105 110
 Asn Val Gly Tyr Ser His Pro Val Glu Ile Lys Ala Glu Glu Gly Ile
 115 120 125
 Thr Phe Ala Val Glu Lys Asn Thr Thr Val Lys Val Ser Gly Val Ser
 130 135 140
 Lys Glu Gln Val Gly Ala Ile Ala Ser Asn Ile Arg Ser Val Arg Pro
 145 150 155 160
 Pro Glu Pro Tyr Lys Gly Lys Gly Ile Arg Tyr Gln Gly Glu Tyr Val
 165 170 175
 Arg Arg Lys Glu Gly Lys Thr Gly Lys
 180 185

<210> 6432
 <211> 348
 <212> PRT
 <213> S.epidermidis

<400> 6432
 Met Lys Arg Arg Cys Val Phe Met Arg Leu Ser Leu Leu Asp Tyr Val
 1 5 10 15
 Pro Leu Phe Glu Gly Arg Thr Pro Asn Asp Ala Leu Lys His Ser Ile
 20 25 30
 Lys Leu Ala Gln His Ala Glu Lys Leu Gly Tyr Leu Arg Tyr Trp Val

35 40 45
 Ala Glu His His Gln Val Tyr Ser Val Val Ser Ser Ala Pro Glu Ile
 50 55 60
 Ile Met Met Ser Ile Leu Glu His Thr Gln His Ile Arg Val Gly Ser
 65 70 75 80
 Gly Gly Val Met Leu Pro His Tyr Ser Pro Tyr Lys Val Ala Glu Gln
 85 90 95
 Phe Lys Ile Met Glu Ala Arg His Pro Gln Arg Ile Asp Met Ala Ile
 100 105 110
 Gly Arg Ser Pro Ser Phe Lys Asn Val Asn Ala Ala Leu Asn Glu Asn
 115 120 125
 Lys Asn Glu Lys Leu Pro Phe Asn Thr Gln Ile Thr Asp Leu Leu Lys
 130 135 140
 Tyr Phe Asn Asn Asp Thr Thr Gln Asp His Arg Phe Lys Ser Leu Leu
 145 150 155 160
 Ala Thr Pro Met Val Thr Ser Phe Pro Gln Leu Tyr Ile Leu Gly Met
 165 170 175
 Ser Asn Arg Ser Ala Lys Leu Ala Ala Gln Arg Gly Leu Pro Phe Val
 180 185 190
 Ile Ala Arg Met Gly Gln Ser Glu Thr Asp Leu His Glu Ala Ile Ser
 195 200 205
 Thr Tyr Arg Lys Tyr Phe Lys Ala Tyr His Gly Glu Ile Asn Asn Ala
 210 215 220
 Lys Pro Tyr Val Ile Leu Ala Thr Phe Val Val Thr Ala Ser Asn Leu
 225 230 235 240
 Ser Arg Val Lys Gln Leu Leu His Thr Leu Gln Leu Trp Leu Met Arg
 245 250 255
 Ile Asn Tyr Leu Asn Gln Pro Lys Ser Tyr Pro Ser Ile Glu Thr Ala
 260 265 270
 Gln Asn Lys His Tyr Ser Gln Arg Glu Leu Glu Lys Leu Glu Lys Met
 275 280 285
 Lys Ser Lys Ile Ile Tyr Gly Met Pro Asn Asp Val Ala Glu Gln Leu
 290 295 300
 Thr Leu Leu His Gln Gln Phe Lys Val Asp Glu Ile Ile Ile Leu Pro
 305 310 315 320
 His Val Phe Gly Glu Asp Ala Arg Met Glu Leu Ile Glu Leu Ile Ala
 325 330 335
 Asn Glu Leu Ile Pro Ser Cys Ser Arg Asp Glu Phe
 340 345

<210> 6433

<211> 76

<212> PRT

<213> S.epidermidis

<400> 6433

Thr Tyr Asn Gly Ile Ser Lys Ala Gly Pro Thr Ile Asp Asn Ile Met
 1 5 10 15
 Ile Ile Glu Val Ile Val Glu Lys Gln Asn Ile Leu Leu Leu Asn Ile
 20 25 30
 Phe Lys Phe Asn Asn Gly Leu Glu Ile Val Ile Cys Arg Leu Thr Lys
 35 40 45
 Met Pro Met Met Ile Lys Leu Ile Lys Ser Glu Gln Arg Thr Ile Gly
 50 55 60
 Leu Glu Lys Pro Arg Leu Pro Ala Leu Leu Lys Ala
 65 70 75

<210> 6434
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 <212> PRT
 <213> S.epidermidis

<400> 6434

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Lys Ala Lys Gly Gly Asn Cys Ile Met Ala Asn Tyr Asp Val Leu Lys
1      5      10      15
Val Asp Gly Ser Lys Ser Gly Ser Val Glu Leu Asn Asp Ala Val Phe
20     25     30
Ala Ile Glu Pro Asn Asn Ser Val Leu Phe Glu Ala Ile Asn Leu Gln
35     40     45
Arg Ala Ser Leu Arg Gln Gly Thr His Ala Val Lys Asn Arg Ser Ala
50     55     60
Val Arg Gly Gly Gly Arg Lys Pro Trp Arg Gln Lys Gly Thr Gly Arg
65     70     75     80
Ala Arg Gln Gly Thr Ile Arg Ala Pro Gln Trp Arg Gly Gly Gly Val
85     90     95
Val Phe Gly Pro Thr Pro Arg Ser Tyr Ala Tyr Lys Met Pro Lys Lys
100    105    110
Met Arg Arg Leu Ala Leu Arg Ser Ala Leu Ser Phe Lys Val Gln Glu
115    120    125
Asn Ser Phe Thr Ile Val Asp Thr Phe Gly Phe Glu Ala Pro Lys Thr
130    135    140
Lys Glu Phe Lys Asn Val Leu Thr Thr Leu Glu Gln Pro Lys Lys Val
145    150    155    160
Leu Val Val Thr Glu Ser Glu Asp Val Asn Val Glu Leu Ser Ala Arg
165    170    175
Asn Ile Pro Gly Val Gln Val Thr Thr Ala Gln Gly Leu Asn Val Leu
180    185    190
Asp Leu Thr Ser Ala Asp Ser Val Ile Ile Thr Glu Ala Ala Ala Lys
195    200    205
Lys Val Glu Glu Val Leu Ala
210    215

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<210> 6435
 <211> 185
 <212> PRT
 <213> S.epidermidis

<400> 6435

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Leu Lys Gly Gly Ser Thr Leu Asn Arg Leu Lys Glu Lys Phe Asn Thr
1      5      10      15
Glu Val Thr Glu Asn Leu Val Lys Lys Phe Asn Tyr Ser Ser Val Met
20     25     30
Glu Val Pro Lys Ile Glu Lys Ile Val Val Asn Met Gly Val Gly Asp
35     40     45
Ala Val Gln Asn Ser Lys Val Leu Asp Asn Ala Val Glu Glu Leu Glu
50     55     60
Leu Ile Thr Gly Gln Lys Pro Leu Val Thr Lys Ala Lys Lys Ser Val
65     70     75     80
Ala Thr Phe Arg Leu Arg Glu Gly Met Pro Ile Gly Ala Lys Val Thr
85     90     95
Leu Arg Gly Glu Arg Met Tyr Glu Phe Leu Asp Lys Leu Ile Ala Val
100    105    110

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Ser Leu Pro Arg Val Arg Asp Phe Gln Gly Val Ser Lys Thr Ala Phe
 115 120 125
 Asp Gly Arg Gly Asn Tyr Thr Leu Gly Val Lys Glu Gln Leu Ile Phe
 130 135 140
 Pro Glu Ile Asp Tyr Asp Lys Val Thr Lys Val Arg Gly Met Asp Ile
 145 150 155 160
 Val Ile Val Thr Thr Ala Asn Thr Asp Glu Glu Ala Arg Glu Leu Leu
 165 170 175
 Thr Asn Phe Gly Met Pro Phe Arg Lys
 180 185

<210> 6436

<211> 55

<212> PRT

<213> S.epidermidis

<400> 6436

Tyr Phe Tyr Ile Thr Lys His Ser Thr Ile Ile Gln Ile Asp Cys Ile
 1 5 10 15
 Ser Asp Met Tyr Asn Leu Ile Ile Cys Asn Met Asn Tyr Lys Lys Ser
 20 25 30
 Tyr Ser Val Ile Asn Tyr Ser Leu Asn Lys Lys Ala Arg Thr Pro Ser
 35 40 45
 Asn Val Glu Phe Thr Leu Lys
 50 55

<210> 6437

<211> 119

<212> PRT

<213> S.epidermidis

<400> 6437

Met Ile Asn Ile Ile Leu Lys Lys Ile Asp Leu Glu Val Ile Arg Met
 1 5 10 15
 Phe Val Val Thr Asn Arg Ile Thr Val Lys Lys Gly Tyr Ala Lys Gln
 20 25 30
 Met Ala Pro Asn Phe Thr Lys Gly Gly Pro Ile Glu Ser Leu Lys Gly
 35 40 45
 Phe Glu Gly Ile Glu Val Trp Gln Ile Asp Lys Asp Asp Tyr Ser Glu
 50 55 60
 Asp Met Tyr Val Asn Ser Trp Trp Glu Thr Glu Glu Asp Phe Lys Asn
 65 70 75 80
 Trp Val Asn Ser Asp Val Phe Lys Gln Ala His Lys Asn Thr Gly Lys
 85 90 95
 Ser Glu Asp Ser Pro Val Ile Lys Ser Glu Ile Val Lys Ser Asn Val
 100 105 110
 Leu Ser Ser Leu Asn Arg Arg
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<210> 6438

<211> 268

<212> PRT

<213> S.epidermidis

<400> 6438

Ile Leu Arg Ile Leu Val Glu Ile Ala Tyr Gln Gly Asn Gln Phe Leu

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1           5           10           15
Gly Phe Gln Ile Gln Gln Gln Gly Arg Thr Val Gln Gln Gln Phe Glu
      20           25           30
Lys Ile Leu Lys Arg Met His Lys His His Val Arg Ile His Pro Ser
      35           40           45
Ser Arg Thr Asp Arg Gly Val His Ala Tyr Gln Gln Phe Phe His Phe
      50           55           60
Asp Thr Glu Leu Asn Ile Asp Asn Lys Gln Trp Gln Tyr Ala Met Asn
65           70           75           80
Arg Ala Leu Pro Asp Ile Tyr Val Lys Asn Val Arg Asn Val Asp
      85           90           95
Glu Tyr Phe His Cys Arg Tyr Asp Cys Val Gly Lys Arg Tyr Arg Tyr
      100          105          110
Lys Val Tyr Gln Gly Asn His Arg Asn Pro Phe Lys Ser Gly Thr Glu
      115          120          125
Thr Phe Val Tyr Glu Thr Leu Asp Tyr Asp Lys Met Asn Lys Ala Ala
      130          135          140
Gln Glu Phe Ile Gly Thr His Asp Phe Thr Gly Phe Cys Ser Gln Lys
145          150          155          160
Thr Glu Val Glu Ser Lys Val Arg Thr Leu Tyr Gln Ser Glu Ile Val
      165          170          175
Ala Thr Lys Glu Gly Phe Asp Tyr Val Val Thr Gly Ser Gly Phe Leu
      180          185          190
Tyr Asn Met Val Arg Val Leu Val Ala Phe Leu Ile Glu Val Gly Lys
      195          200          205
Gly Lys His Glu Pro Asn Asp Val Pro Lys Leu Leu Glu Asp Lys Asn
      210          215          220
Arg Asn Asn Val Pro Leu Thr Ala Pro Pro Asp Gly Leu Tyr Leu Glu
225          230          235          240
Lys Ile Tyr Leu Ser Pro Glu Glu Leu Ile Gln Glu Tyr Gly Lys Asp
      245          250          255
Ile Lys Ile His Tyr Lys Lys Ser Leu Glu Lys His
      260          265

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<210> 6439

<211> 40

<212> PRT

<213> S.epidermidis

<400> 6439

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Asn Arg Phe Ile Ile Leu Glu Val Tyr His Leu Leu Ser Tyr Glu Phe
1           5           10           15
Lys Ile Tyr Ile Val Ala Phe Asn Ile Asn Phe Tyr Phe Leu Tyr Asp
      20           25           30
Tyr Phe Asp Phe Gln Lys, Tyr Tyr
      35           40

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<210> 6440

<211> 347

<212> PRT

<213> S.epidermidis

<400> 6440

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His Asn Ser Ile Asn Tyr Tyr Tyr Lys Asp Asp Asp Asp Met Asn Asn
1           5           10           15
Glu Gln Ile Val Phe Asn Lys Val Pro Asp Gly Met Pro Gln Asp Asp

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      20      25      30
Thr Phe Lys Tyr Glu Asp Ile Asp Val Ile Glu Pro Ser Glu Asn Glu
      35      40      45
Leu Gln Leu Lys Thr Leu Tyr Ile Ser Val Asp Pro Tyr Met Arg Gly
      50      55      60
Arg Met Thr Asn Ala Asp Ser Tyr Ile Asp Pro Phe Lys Gln Gly Glu
      65      70      75      80
Pro Phe Asn Gly His Thr Val Ser Lys Val Leu Lys Ser Lys Asp Ser
      85      90      95
Asn Phe Asp Glu Gly Asp Ile Val Val Gly Met Leu Pro Trp Arg Lys
      100      105      110
Ile Asn Thr Val Asn Ser Glu Tyr Val Asn Lys Val Pro Thr Ser Asp
      115      120      125
Val Pro Leu His Leu Tyr Leu Ser Val Leu Gly Met Pro Gly Gln Thr
      130      135      140
Ala Tyr His Gly Leu Leu Asp Ile Gly Gln Pro Lys Glu Gly Glu Thr
      145      150      155      160
Val Val Ile Ser Ala Ala Ser Gly Ala Val Gly Ser Val Val Gly Gln
      165      170      175
Ile Ala Lys Leu Lys Gly Cys Arg Val Val Gly Ile Ala Gly Gly Asp
      180      185      190
Lys Lys Val Asn Tyr Leu Lys Asn Glu Leu Arg Phe Asp Ala Gly Ile
      195      200      205
Asp Tyr Lys Lys Asp Asn Phe Pro Glu Ala Leu Lys Glu Ala Val Pro
      210      215      220
Asn Gly Ile Asp Val Tyr Phe Glu Asn Val Gly Gly Tyr Ile Gly Asp
      225      230      235      240
Glu Val Phe Lys His Leu Asn Thr His Ala Arg Ile Pro Val Cys Gly
      245      250      255
Ala Ile Ser Ser Tyr Asn His Pro Glu Lys Asp Ile Gly Pro Arg Ile
      260      265      270
Gln Gln Thr Leu Ile Lys Asn Gln Ala Met Met Arg Gly Phe Ile Val
      275      280      285
Ala Glu Phe Ala Asp Gly Phe Lys Glu Ala Ser Lys Gln Leu Ala Gln
      290      295      300
Trp Val Gln Glu Asn Lys Ile Lys Thr Gln Val Ser Val Glu Asp Gly
      305      310      315      320
Phe Asp Lys Val Pro Gln Ala Phe Arg Asn Leu Leu Thr Gly Asp Asn
      325      330      335
Phe Gly Lys Gln Val Ile Lys Val Ala Ser Glu
      340      345

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<210> 6441

<211> 411

<212> PRT

<213> S.epidermidis

<400> 6441

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Ser Ile Leu Met Ile Met Ile Ile Ile Ile Asn Glu Lys Asp Arg Trp
1.      5      10      15
Asn Leu Met Ala Lys Tyr Phe Phe Ser Ser Ser Phe Leu Leu Phe Leu
      20      25      30
Gly Asn Trp Ile Gly Gln Val Gly Leu Asn Trp Phe Val Leu Thr Thr
      35      40      45
Tyr His Asn Ala Val Tyr Leu Gly Leu Val Asn Phe Cys Arg Leu Ile
      50      55      60

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Pro Ile Leu Leu Leu Ser Val Trp Ala Gly Ser Ile Ala Asp Lys Tyr
 65 70 75 80
 Asp Lys Gly Leu Leu Leu Arg Ile Thr Ile Thr Ser Ser Phe Ile Ile
 85 90 95
 Thr Ala Leu Leu Cys Leu Leu Thr Tyr Ser Leu Asn Ser Ile Pro Ile
 100 105 110
 Phe Ile Ile Leu Leu Tyr Ala Thr Phe Arg Gly Ile Leu Ser Ala Val
 115 120 125
 Glu Thr Pro Val Arg Gln Ala Val Leu Pro Asp Leu Ser Ser Lys Ile
 130 135 140
 Ser Thr Thr Gln Ala Val Ser Phe His Ser Phe Ile Ile Asn Ile Cys
 145 150 155 160
 Arg Ser Ile Gly Pro Ala Ile Ala Gly Gly Leu Ile Ala Val Tyr His
 165 170 175
 Thr Pro Thr Thr Phe Leu Ala Gln Ala Val Cys Tyr Phe Ile Ala Ala
 180 185 190
 Val Leu Cys Ile Pro Ile His Phe Glu Val Ile Leu Ser Gln Lys Glu
 195 200 205
 Gly Lys Ala Leu Pro Leu Lys Val Val Leu Asn Tyr Phe Lys Ser Asn
 210 215 220
 Leu Glu Gly Ser Gln Ile Phe Ile Thr Ser Ile Ile Ile Met Ala Thr
 225 230 235 240
 Gly Phe Ser Tyr Thr Thr Val Leu Pro Val Leu Thr Asn His Ile Phe
 245 250 255
 Pro Gly Gln Ser Gln Val Phe Gly Ile Ala Met Thr Phe Cys Ala Ile
 260 265 270
 Gly Gly Ile Val Ala Thr Ile Val Leu Pro Ser Ile Leu Lys His Leu
 275 280 285
 Ser Thr Val Lys Met Tyr Tyr Leu Ser Ser Ile Leu Phe Gly Ile Ala
 290 295 300
 Leu Leu Gly Ile Ile Ile His His Leu Val Val Met Phe Ile Cys Ile
 305 310 315 320
 Thr Leu Ile Gly Leu Phe Ser Gln Trp Ala Arg Thr Thr Asn Arg Val
 325 330 335
 Tyr Phe Gln His Ser Val Lys Asp Cys Asp Arg Gly Lys Val Leu Ser
 340 345 350
 Ile Ile Met Met Asp Arg Gly Met Ile Pro Leu Gly Ser Leu Ile Met
 355 360 365
 Ser Phe Phe Ala Asp Met Phe Gly Ile Leu Thr Thr Phe Thr Ile Met
 370 375 380
 Gly Ile Ser Thr Ile Ser Ile Ser Leu Ile Phe Tyr Ile Ile Gln Arg
 385 390 395 400
 Ile Ser Asn Met Glu Ser Asn Asn Glu Ser
 405 410

<210> 6442

<211> 179

<212> PRT

<213> S.epidermidis

<400> 6442

Asn Val Leu Ile Gly Gly Ile Lys Met Lys Ile Ala Ile Gly Cys Asp
 1 5 10 15
 His Ile Val Thr Asp Thr Lys Met Glu Val Ser Gln His Leu Lys Ser
 20 25 30
 Gln Gly His Glu Val Ile Asp Val Gly Thr Tyr Asp Phe Thr Arg Thr

35 40 45
 His Tyr Pro Ile Tyr Gly Lys Lys Val Gly Glu Lys Val Ala Ser Gly
 50 55 60
 Glu Ala Asp Leu Gly Val Cys Ile Cys Gly Thr Gly Val Gly Ile Ser
 65 70 75 80
 Asn Ala Ala Asn Lys Val Pro Gly Val Arg Thr Ala Leu Val Arg Asp
 85 90 95
 Met Thr Ser Ala Leu Tyr Ser Lys Glu Glu Leu Asn Ala Asn Val Val
 100 105 110
 Ser Phe Gly Gly Lys Val Ala Gly Glu Leu Phe Ile Phe Asp Ile Val
 115 120 125
 Asp Ala Phe Ile Glu Ala Glu Tyr Lys Pro Thr Glu Glu Asn Lys Lys
 130 135 140
 Leu Ile Ala Lys Ile Asn His Leu Glu Ala His Asn Asn Asp Gln Ala
 145 150 155 160
 Asp Pro His Phe Phe Asp Glu Phe Leu Glu Lys Trp Asn Lys Gly Glu
 165 170 175
 Tyr His Asp

<210> 6443
 <211> 292
 <212> PRT
 <213> S.epidermidis

<400> 6443
 Arg Gly Leu Met Met Lys Ser Lys Phe Thr Ile Leu Leu Phe Thr Ile
 1 5 10 15
 Phe Ser Thr Thr Val Leu Val Leu Val Ile Ile Tyr Asn Lys Thr Gln
 20 25 30
 Ser Gln Ser Tyr Ile Ser Thr His Tyr Ser Asn Asn Lys Ile Lys Thr
 35 40 45
 Thr Ala Thr Leu Phe Leu His Gly Tyr Gly Gly Ser Glu Arg Ser Glu
 50 55 60
 Thr Phe Met Val Lys Gln Ala Leu Asn Lys Asn Val Thr Asn Glu Val
 65 70 75 80
 Ile Thr Ala Arg Val Ser Ser Glu Gly Lys Val Tyr Phe Asp Lys Lys
 85 90 95
 Leu Ser Glu Asp Ala Ala Asn Pro Ile Val Lys Val Glu Phe Lys Asp
 100 105 110
 Asn Lys Thr Gly Asn Phe Lys Glu Asn Ala Tyr Trp Ile Lys Glu Val
 115 120 125
 Leu Ser Gln Leu Lys Ser Gln Phe Gly Ile Gln Gln Phe Asn Phe Val
 130 135 140
 Gly His Ser Met Gly Asn Ile Ser Phe Ala Phe Tyr Met Lys Asn Tyr
 145 150 155 160
 Gly Asp Asp Arg His Leu Pro Gln Leu Lys Lys Glu Val Asn Ile Ala
 165 170 175
 Gly Val Tyr Asn Gly Ile Leu Asn Met Asn Glu Asn Val Asn Glu Ile
 180 185 190
 Ile Val Asp Lys Gln Gly Lys Pro Ser Arg Met Asn Ala Ala Tyr Arg
 195 200 205
 Gln Leu Leu Ser Leu Tyr Lys Ile Tyr Cys Gly Lys Glu Ile Glu Val
 210 215 220
 Leu Asn Ile Tyr Gly Asp Leu Glu Asp Gly Ser His Ser Asp Gly Arg
 225 230 235 240

Val Ser Asn Ser Ser Ser Gln Ser Leu Gln Tyr Leu Leu Arg Gly Ser
 245 250 255
 Thr Lys Ser Tyr Gln Glu Met Lys Phe Lys Gly Ala Lys Ala Gln His
 260 265 270
 Ser Gln Leu His Glu Asn Lys Asp Val Ala Asn Glu Ile Ile Gln Phe
 275 280 285
 Leu Trp Glu Thr
 290

<210> 6444

<211> 149

<212> PRT

<213> S.epidermidis

<400> 6444

Arg Arg Lys Ile Ile Met Leu Leu Pro Lys Arg Val Lys Tyr Arg Arg
 1 5 10 15
 Gln His Arg Pro Lys Thr Thr Gly Arg Ser Lys Gly Gly Asn Tyr Val
 20 25 30
 Thr Phe Gly Glu Tyr Gly Leu Gln Ala Thr Thr Thr Ser Trp Ile Thr
 35 40 45
 Ser Arg Gln Ile Glu Ser Ala Arg Ile Ala Met Thr Arg Tyr Met Lys
 50 55 60
 Arg Gly Gly Lys Val Trp Ile Lys Ile Phe Pro His Thr Pro Tyr Thr
 65 70 75 80
 Lys Lys Pro Leu Glu Val Arg Met Gly Ala Gly Lys Gly Ala Val Glu
 85 90 95
 Gly Trp Ile Ala Val Val Lys Pro Gly Arg Ile Leu Phe Glu Val Ala
 100 105 110
 Gly Val Pro Glu Glu Val Ala Arg Glu Ala Leu Arg Leu Ala Ser His
 115 120 125
 Lys Leu Pro Val Lys Ser Lys Phe Val Lys Arg Glu Glu Leu Gly Gly
 130 135 140
 Glu Thr Asn Glu Ser
 145

<210> 6445

<211> 255

<212> PRT

<213> S.epidermidis

<400> 6445

Met Ile Glu Ile Glu Lys Pro Arg Ile Glu Thr Ile Glu Val Ser Glu
 1 5 10 15
 Asp Ala Lys Phe Gly Lys Phe Val Val Glu Pro Leu Glu Arg Gly Tyr
 20 25 30
 Gly Thr Thr Leu Gly Asn Ser Leu Arg Arg Ile Leu Leu Ser Ser Leu
 35 40 45
 Pro Gly Ala Ala Val Lys Tyr Ile Glu Ile Glu Gly Val Leu His Glu
 50 55 60
 Phe Ser Ala Val Asp Asn Val Val Glu Asp Val Ser Thr Ile Ile Met
 65 70 75 80
 Asn Ile Lys Lys Leu Ala Leu Lys Ile Tyr Ser Glu Glu Asp Lys Thr
 85 90 95
 Leu Glu Ile Asp Val Lys Asp Glu Gly Glu Val Thr Ala Ser Asp Ile
 100 105 110

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Thr His Asp Ser Asp Val Glu Ile Leu Asn Pro Glu Leu Lys Ile Ala
      115              120              125
Thr Val Ser Lys Gly Gly His Leu Lys Val Arg Leu Val Ala Asn Lys
      130              135              140
Gly Arg Gly Tyr Ala Leu Ala Glu Gln Asn Asn Thr Ser Asp Leu Pro
145      150              155              160
Ile Gly Val Ile Pro Val Asp Ser Leu Tyr Ser Pro Val Glu Arg Val
      165              170              175
Asn Tyr Thr Val Glu Asn Thr Arg Val Gly Gln Ser Ser Asp Phe Asp
      180              185              190
Lys Leu Thr Leu Asp Val Trp Thr Asn Gly Ser Ile Thr Pro Gln Glu
      195              200              205
Ser Val Ser Leu Ala Ala Lys Ile Met Thr Glu His Leu Asn Ile Phe
      210              215              220
Val Ser Leu Thr Asp Glu Ala Gln Asn Ala Glu Ile Met Ile Glu Lys
225      230              235              240
Glu Glu Asp Gln Lys Glu Lys Val Ile Glu Ile Ser Met Glu Glu
      245              250              255

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<210> 6446
<211> 42
<212> PRT
<213> S.epidermidis

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<400> 6446
Val Val Glu Ile Leu Leu Asp Lys Ser Gly Lys Thr Ala Cys Leu Thr
1      5              10              15
Gly Val Ser Thr Ala Leu Ser Met Pro Leu Asn Val Ala Tyr Lys Arg
      20              25              30
Met Met Lys Ile Gly Ile Leu Leu Arg Leu
      35              40

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<210> 6447
<211> 135
<212> PRT
<213> S.epidermidis

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<400> 6447
Lys Glu Glu Ile Thr Leu Ala Gln Val Glu Tyr Lys Gly Thr Gly Arg
1      5              10              15
Arg Lys Asn Ser Val Ala Arg Val Arg Leu Val Pro Gly Glu Gly Asn
      20              25              30
Ile Thr Val Asn Glu Arg Asp Val Arg Asp Tyr Leu Pro Phe Glu Ser
      35              40              45
Leu Ile Leu Asp Leu Asn Gln Pro Phe Asp Val Thr Glu Thr Lys Gly
      50              55              60
Asn Tyr Asp Val Leu Val Asn Val His Gly Gly Phe Thr Gly Gln
      65              70              75              80
Ala Gln Ala Ile Arg His Gly Ile Ala Arg Ala Leu Leu Glu Ala Asp
      85              90              95
Pro Glu Tyr Arg Gly Ser Leu Lys Arg Ala Gly Leu Leu Thr Arg Asp
      100              105              110
Pro Arg Met Lys Glu Arg Lys Lys Pro Gly Leu Lys Lys Ala Arg Arg
      115              120              125
Ser Pro Gln Phe Ser Lys Arg
      130              135

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<210> 6448
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6448
 Asn Tyr Met Ile Ile Asn Gly Ile Val Leu Tyr His Pro Thr Ile Ser
 1 5 10 15
 Pro Gly Asn Leu Leu Cys Tyr Lys Ile Tyr Lys Gln Ser Arg Thr Thr
 20 25 30
 Val Asn Glu Ile Asn Glu Ile Leu Arg Phe
 35 40

<210> 6449
 <211> 55
 <212> PRT
 <213> S.epidermidis

<400> 6449
 Asn Asn Thr Ile Pro Pro Leu Val Asn Asn Thr Cys Ile Glu Lys Val
 1 5 10 15
 Lys Thr Lys Lys Lys Lys Ile Gly Val Asn Pro Leu Ile Lys Asn Gln
 20 25 30
 Lys Gly Met Arg Ala Asn Leu Ile Asn Asn Ile Ile Lys Arg Asn Asn
 35 40 45
 His Ala Tyr Val Pro Ser Glu
 50 55

<210> 6450
 <211> 475
 <212> PRT
 <213> S.epidermidis

<400> 6450
 Lys Gly Val Leu Tyr Met Thr Lys Lys Leu Pro Asp Asp Phe Ile Phe
 1 5 10 15
 Gly Gly Ala Thr Ala Ala Tyr Gln Ala Glu Gly Ala Thr Gln Thr Asp
 20 25 30
 Gly Lys Gly Arg Val Ala Trp Asp Thr Tyr Leu Glu Glu Asn Tyr Trp
 35 40 45
 Tyr Thr Ala Glu Pro Ala Ser Asp Phe Tyr Asn Arg Tyr Pro Val Asp
 50 55 60
 Leu Glu Leu Ser Glu Arg Phe Gly Val Asn Gly Ile Arg Ile Ser Ile
 65 70 75 80
 Ala Trp Ser Arg Ile Phe Pro Lys Gly Tyr Gly Glu Val Asn Gln Lys
 85 90 95
 Gly Val Glu Tyr Tyr His Asn Leu Phe Lys Glu Cys His Lys Arg His
 100 105 110
 Val Glu Pro Phe Val Thr Leu His His Phe Asp Thr Pro Glu Val Leu
 115 120 125
 His Lys Asp Gly Asp Phe Leu Asn Arg Lys Thr Ile Asp Tyr Phe Val
 130 135 140
 Asp Tyr Ala Glu Phe Cys Phe Lys Glu Phe Pro Glu Val Lys Tyr Trp
 145 150 155 160
 Thr Thr Phe Asn Glu Ile Gly Pro Ile Gly Asp Gly Gln Tyr Leu Val

6448 6449 6450

165 170 175
 Gly Lys Phe Pro Pro Gly Ile Lys Tyr Asp Phe Glu Lys Val Phe Gln
 180 185 190
 Ser His His Asn Met Met Val Ala His Ala Arg Ala Val Lys Leu Phe
 195 200 205
 Lys Asp Glu Asn Tyr Lys Gly Glu Ile Gly Val Val His Ala Leu Pro
 210 215 220
 Thr Lys Tyr Pro Tyr Asp Pro Ser Asn Pro Glu Asp Val Arg Ala Ala
 225 230 235 240
 Glu Leu Glu Asp Ile Ile His Asn Lys Phe Ile Leu Asp Ala Thr Tyr
 245 250 255
 Leu Gly Lys Tyr Ser Arg Glu Thr Met Glu Gly Val Gln His Ile Leu
 260 265 270
 Ser Val Asn Gly Gly Gln Leu Glu Ile Ser Asp Glu Asp Tyr Lys Ile
 275 280 285
 Leu Asp Glu Ala Lys Asp Leu Asn Asp Phe Leu Gly Ile Asn Tyr Tyr
 290 295 300
 Met Ser Asp Trp Met Arg Gly Phe Glu Gly Glu Ser Glu Ile Thr His
 305 310 315 320
 Asn Ala Thr Gly Asp Lys Gly Gly Ser Lys Tyr Gln Leu Lys Gly Val
 325 330 335
 Gly Gln Arg Glu Phe Asp Val Asp Val Pro Arg Thr Asp Trp Asp Trp
 340 345 350
 Met Ile Tyr Pro Gln Gly Leu Tyr Asp Gln Ile Met Arg Val Val Lys
 355 360 365
 Asp Tyr Pro Asn Tyr His Lys Ile Tyr Ile Thr Glu Asn Gly Leu Gly
 370 375 380
 Tyr Lys Asp Val Phe Asp Glu Lys Glu Lys Thr Val His Asp Asp Ala
 385 390 395 400
 Arg Ile Asp Tyr Ile Lys Gln His Leu Ser Val Ile Ala Asp Ala Ile
 405 410 415
 Ala Asp Gly Ala Asn Val Lys Gly Tyr Phe Leu Trp Ser Leu Met Asp
 420 425 430
 Val Phe Ser Trp Ser Asn Gly Tyr Glu Lys Arg Tyr Gly Leu Phe Tyr
 435 440 445
 Val Asp Phe Glu Thr Gln Glu Arg Phe Pro Lys Lys Ser Ala Tyr Trp
 450 455 460
 Tyr Lys Glu Leu Ala Glu Ser Lys Glu Ile Lys
 465 470 475

<210> 6451

<211> 92

<212> PRT

<213> S.epidermidis

<400> 6451

Leu Lys Glu Val Phe Ser Met Ala Met Thr Val Lys Lys Asn Asp Asn
 1 5 10 15
 Glu Val Arg Ile Gln Trp Arg Val Ala Asp Ile Lys Ile Pro Asn Asn
 20 25 30
 Glu Ile Lys Asn Val Thr Gln Asp Gln Asp Ile His Ala Val Pro Glu
 35 40 45
 Glu Asn Gly Lys Glu Ile Ser Arg Ile Gly Ser Thr Phe Gly Lys Thr
 50 55 60
 Asn Arg Val Leu Ile Asp Thr Asp Gln His Leu Tyr Ile Ile Tyr Thr
 65 70 75 80

Gln Asn Asp Gln Lys Val Tyr Asn Glu Leu Thr Lys
85 90

<210> 6452
<211> 62
<212> PRT
<213> S.epidermidis

<400> 6452
Ala Val Leu Phe Val Tyr Asp Leu Tyr Phe Tyr Phe Leu Met Gly His
1 5 10 15
Gln Asn Asp Ile Val Thr Ser Ile Arg Ala Cys Thr Leu Ile Cys Asn
20 25 30
Val Ser Gly Ser Ile Thr Lys Lys Tyr Asp Ile Glu Thr Ile Lys Phe
35 40 45
Thr Thr Ser Tyr Val Ile Lys Ile Arg Asn Lys Val Arg Leu
50 55 60

<210> 6453
<211> 47
<212> PRT
<213> S.epidermidis

<400> 6453
Trp Ile Ile Phe Arg Lys Asp Leu Phe Lys Pro Arg Arg Ile Asp Thr
1 5 10 15
Arg Ile Trp Lys Arg Tyr Lys Asn Thr Leu Gln Lys Ile Val Gly Lys
20 25 30
Thr Leu Ile Val Ile Asp Lys Ser Thr Val Lys Leu Tyr Asp Tyr
35 40 45

<210> 6454
<211> 54
<212> PRT
<213> S.epidermidis

<400> 6454
Thr Leu Phe Ser Tyr Asp Leu Ala Tyr Ile Tyr Cys Ser Cys Phe Phe
1 5 10 15
Leu Thr Tyr Asp Arg His Phe Leu Phe Tyr Val Ile Ala Thr Phe Ser
20 25 30
His Tyr Lys Leu Glu Arg Lys Ile Ser Ile Ile Phe Arg Asn Ile Ile
35 40 45
Ile Leu Gln Ile Asn Thr
50

<210> 6455
<211> 113
<212> PRT
<213> S.epidermidis

<400> 6455
Ser Val Arg Ser Cys Glu Ile Asn Ser Ile Cys Arg Ser Ser Leu Glu
1 5 10 15
His Pro Thr Lys Arg Val Leu Ala Pro Cys Cys Gly Lys Cys Arg Ala
20 25 30

<210> 6459
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 6459
 Phe Leu Ile Pro Ala Asn Asn Ile Ile His Val Ala Lys Ile Asn Gly
 1 5 10 15
 His Val Lys Val Gly Lys Pro Ser Gly Ala Ser Asn Val Leu Lys Pro
 20 25 30
 Lys Cys Met Asn Ala Val Ser Thr Ile Pro Lys Ile Ile Ala Arg
 35 40 45

<210> 6460
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6460
 Ser Asn Val Pro Ile Thr Lys Ala Leu Ile Leu Glu Ile Ser Ile Asp
 1 5 10 15
 Gly Thr Val Glu Ile Leu Asn Ile Lys His Lys Ile Met Ile Ile Ser
 20 25 30
 Gly Ile His Thr Gln Lys Phe Lys Leu
 35 40

<210> 6461
 <211> 93
 <212> PRT
 <213> S.epidermidis

<400> 6461
 Leu Val Met Leu Leu Asn Ile Ile Glu Gly Val Thr His Ile Asn Pro
 1 5 10 15
 Lys Val Leu Lys Ala Leu Ala Ile Thr Ser Asn Val Leu Leu Val Ile
 20 25 30
 Gly Ile Ile Cys Leu Ile Met Leu Lys Leu Met Leu Ala Ile Ala Phe
 35 40 45
 Phe Val Val Ser Leu Thr Ile Ser Leu Val Ile Phe Asn Val Met Phe
 50 55 60
 Arg His Arg Thr Gly Met Lys Ile Ala Ile Asn Val Ser Phe Phe Ile
 65 70 75 80
 Val Met Ile Ala Ile Val Ile Ala Tyr Phe Val Leu Ser
 85 90

<210> 6462
 <211> 59
 <212> PRT
 <213> S.epidermidis

<400> 6462
 Leu His Tyr Pro Lys Thr Gly Leu Val Lys Val Leu Ser Lys Asn Leu
 1 5 10 15
 Gln Phe Ala Leu Ile Thr His Ser Pro Lys Asn Lys Ile Lys Cys Pro
 20 25 30
 Asn Tyr Thr Arg Asn His Ser Ile Val Ile Lys Lys Ile Ser Lys Lys

130

135

<210> 6465

<211> 92

<212> PRT

<213> S.epidermidis

<400> 6465

Pro	Ser	His	Thr	Phe	Tyr	Leu	Pro	Ser	Phe	Val	Ala	Ser	Val	Val	Ser
1				5					10					15	
Phe	Asn	Pro	Ile	Ile	Pro	Lys	Ile	Arg	Val	Ile	Ile	Lys	Asn	Ile	Leu
			20					25					30		
Val	Lys	Val	Asn	Gly	Trp	Leu	Lys	Lys	Ile	Ile	Ser	Thr	Asn	Thr	Val
		35					40					45			
Pro	Thr	Ala	Pro	Ile	Pro	Thr	Lys	Asn	Ala	Tyr	Thr	Val	Pro	Thr	Gly
	50					55					60				
Lys	Cys	Phe	Glu	Ala	Ser	Met	Thr	Arg	Lys	Lys	Leu	Lys	Ala	Ile	Lys
65					70					75					80
Lys	Arg	Val	Asn	Ile	His	Val	Asn	Asn	Glu	Cys	Ala				
			85						90						

<210> 6466

<211> 40

<212> PRT

<213> S.epidermidis

<400> 6466

Ile	Ile	Trp	Leu	Tyr	Ser	Thr	Val	Val	Ile	Asn	Lys	Ile	Leu	Ser	Val
1				5					10					15	
Ile	Tyr	Asn	Ser	Lys	Val	Asn	Gly	Lys	Ile	Ser	Phe	Tyr	Asn	Ala	Val
			20					25					30		
Leu	Val	Asn	Ile	Leu	Ile	Ile	Thr								
		35					40								

<210> 6467

<211> 45

<212> PRT

<213> S.epidermidis

<400> 6467

Ile	Ile	Ile	Thr	Phe	Lys	Gln	Trp	Ile	His	Ser	Thr	Asn	Leu	Thr	Lys
1				5					10					15	
Pro	Gly	Asp	Lys	Thr	Thr	Ile	Asn	Ile	Leu	Val	Gly	Phe	Leu	Arg	Asp
			20					25					30		
Asp	Asp	Ile	Asn	Arg	Ser	Met	Ile	Tyr	Val	Lys	Ser	Ala			
		35					40					45			

<210> 6468

<211> 145

<212> PRT

<213> S.epidermidis

<400> 6468

Gln	Ser	Ile	Thr	Gln	Ser	Phe	Lys	Glu	Ala	Ile	Ser	Met	Ile	Pro	Gly
1				5					10					15	
Glu	Ile	Ile	Val	Lys	Asn	Thr	Glu	Ile	Glu	Val	Asn	Lys	His	His	Pro

6465-6468

20 25 30
 Glu Thr Val Ile Glu Val Lys Asn Thr Gly Asp Arg Pro Ile Gln Val
 35 40 45
 Gly Ser His Phe His Phe Phe Glu Ala Asn Lys Ala Leu Glu Phe Asp
 50 55 60
 Arg Glu Lys Ala Tyr Gly Lys His Leu Asp Ile Pro Ala Gly Ala Ala
 65 70 75 80
 Val Arg Phe Glu Pro Gly Asp Glu Lys Lys Val Gln Leu Val Glu Tyr
 85 90 95
 Ser Gly Arg Arg Lys Ile Tyr Gly Phe Arg Gly Leu Val Asp Gly Asp
 100 105 110
 Ile Asp Glu Glu Arg Val Phe Arg Pro Asn Asp Ser Asn Gln Asn Ala
 115 120 125
 Ala Val Lys Asn Asp Ala Gly Glu Asp Asn Ala Asn Lys Lys Gly Gly
 130 135 140
 Lys
 145

<210> 6469
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 6469
 Tyr Cys Tyr Thr Ile Ser Phe Asn Pro Ile Tyr Leu Cys Asn Met Asn
 1 5 10 15
 Arg Asn Asp Thr His Ser Ile Phe Lys Val Phe Asp Phe Glu Gln His
 20 25 30
 Lys Tyr Cys Tyr Met Asn Val Lys Leu Leu Lys Ile His Phe Asp Asn
 35 40 45
 Asn

<210> 6470
 <211> 58
 <212> PRT
 <213> S.epidermidis

<400> 6470
 Thr Asn Leu Thr Arg Cys Leu Met Tyr Lys Asp Tyr Asn Met Thr Gln
 1 5 10 15
 His Thr Leu Leu Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile
 20 25 30
 Ser Arg His Val Asn Asp Ile Ala Glu Thr Ile Pro Asp Thr Glu Phe
 35 40 45
 Asp Glu Phe Arg Tyr His Arg Gly Leu Ile
 50 55

<210> 6471
 <211> 62
 <212> PRT
 <213> S.epidermidis

<400> 6471
 Thr Lys Leu Thr Arg Cys Leu Met Tyr Arg Asp Tyr Asn Lys Thr Gln
 1 5 10 15

Leu Thr Leu Pro Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile
 20 25 30
 Thr Arg Tyr Val His Asn Ile Val Glu Thr Ile Leu Glu Thr Glu Phe
 35 40 45
 Arg His His Arg Asp Ser Thr Ser Tyr His Pro Lys Met Met
 50 55 60

<210> 6472

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6472

Asp Cys Val Thr Ile Leu Ala Lys Asn Tyr Lys Ser Ile Thr Leu His
 1 5 10 15
 Thr Asn Ile Asn Phe Ser Val Arg Val Trp Leu Val Val Lys Gln Glu
 20 25 30
 Arg Ile Lys Ile Tyr Phe Val Thr His
 35 40

<210> 6473

<211> 221

<212> PRT

<213> S.epidermidis

<400> 6473

Tyr Ser Pro Thr Arg Arg Tyr Asn Cys Ala His Ser Thr Gly Gln Trp
 1 5 10 15
 Gly Leu Ile Lys Met Lys Ala Ile Ile Leu Ala Gly Gly Glu Ser Ser
 20 25 30
 Arg Phe Gly Lys Ala Lys Ala Phe Ala Lys Ile Asp Asn Gln Tyr Phe
 35 40 45
 Tyr Gln Lys Ile Ile Glu Thr Leu Lys Ser Thr Asn Met Phe Asn Arg
 50 55 60
 Ile Ile Ile Ser Thr Asn Ser Gln Leu Ala Ser Gln Phe Glu Tyr Glu
 65 70 75 80
 Tyr Val Ile Ile Asp Asp Glu His His Gln Asn Lys Gly Pro Leu Thr
 85 90 95
 Gly Ile Tyr Ser Val Met Lys Gln Tyr Met Asp Glu Glu Leu Phe Phe
 100 105 110
 Ile Val Ser Val Asp Thr Pro Met Ile Thr Ser Lys Ala Val Asn Gly
 115 120 125
 Leu Tyr His Phe Met Val Ser Asn Leu Ile Glu Ser Arg Leu Asp Ile
 130 135 140
 Val Ala Phe Lys Glu Gly Glu Ile Cys Ile Pro Thr Ile Gly Phe Tyr
 145 150 155 160
 Thr Leu Ser Thr Phe Pro Phe Ile Glu Lys Ala Leu Asn Ser Asn His
 165 170 175
 Leu Ser Leu Lys His Val Ile Lys Gln Leu Ser Thr Asp Trp Leu Asp
 180 185 190
 Val Thr Glu Ile Asp Ser Pro His Tyr Trp Tyr Lys Asn Ile Asn Phe
 195 200 205
 Gln His Asp Leu Asp Ser Leu Lys Lys Gln Ile Asn Glu
 210 215 220

<210> 6474

<211> 180
 <212> PRT
 <213> S.epidermidis

<400> 6474

Ala	Leu	Pro	Thr	Val	Pro	Arg	Pro	Ser	Phe	Cys	Ser	Leu	Phe	Leu	Thr
1				5					10					15	
Pro	Phe	Leu	Lys	Asn	Val	Ala	Pro	Lys	Glu	Gly	Thr	Arg	Val	Ile	Glu
		20						25					30		
Thr	Ser	Ser	Glu	Ala	Asn	Lys	Leu	Lys	Val	Met	Ala	Ser	Ala	Asn	Gly
		35					40					45			
Leu	Asn	Ile	Ser	Pro	Thr	Glu	Pro	Asp	Thr	Asn	Thr	Ser	Gly	Lys	Asn
	50					55					60				
Thr	Thr	Ile	Val	Thr	Arg	Val	Asp	Asp	Ile	Ile	Gly	Leu	Asn	Thr	Ser
65					70					75					80
Leu	Val	Ala	Leu	Ile	Ile	Lys	Phe	Ser	Pro	Leu	Ser	Phe	Ser	Phe	Gly
			85						90					95	
Ser	Asp	Asn	Leu	Leu	Asn	Ile	Phe	Ser	Thr	Thr	Thr	Ile	Glu	Ser	Ser
		100						105					110		
Ile	Thr	Arg	Pro	Ile	Ala	Thr	Val	Asn	Ala	Pro	Lys	Val	Arg	Ile	Phe
		115					120					125			
Asn	Asp	Thr	Leu	Leu	Asn	Phe	Asn	Ala	Met	Ser	Ala	Ile	Asn	Ile	Asp
	130					135					140				
Ile	Gly	Ile	Asp	Thr	Ile	Glu	Ile	Ala	Val	Val	Leu	Ile	Phe	Leu	Lys
145					150					155					160
Asn	Arg	Arg	Ile	Thr	Ile	Ile	Ala	Thr	Ile	Val	Pro	Arg	Ala	Ala	Phe
			165						170					175	
Ser	Thr	Ile	Val												
			180												

<210> 6475
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6475

Leu	Gln	Asn	Ala	Phe	Ile	His	Leu	Phe	Leu	Asn	Gln	Asn	Ile	Tyr	Asn
1				5					10					15	
Ser	Glu	Ile	Asp	Val	Ile	Lys	Asn	Ile	Asn	Pro	Asn	Asn	Ile	Ser	Leu
		20						25					30		
Ile	Lys	Ser	Ser	Tyr	Phe	Phe	Lys	Phe							
	35						40								

<210> 6476
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 6476

Arg	Asp	Thr	Ala	Ser	Leu	Asn	Val	Cys	Leu	Thr	Ser	Phe	Leu	Lys	Arg
1				5					10					15	
Phe	Val	Ser	Asn	Ile	Arg	Lys	Ser	Ile	Ala	Lys	Met	Thr	Ser	Met	Leu
		20						25					30		
Ile	Met	Asn	Asn	Val	Val	Ile	Arg	Ser	Arg	Val	Phe	Phe	Asn	Ile	Ser
	35						40					45			
Thr	Asn	Ser													

50

<210> 6477
 <211> 87
 <212> PRT
 <213> S.epidermidis

<400> 6477
 Arg Gly Phe Tyr Met Arg Lys Phe Ile Leu Leu Leu Phe Ile Ile Leu
 1 5 10 15
 Asn Leu Val Ala Ile Ile Ile Thr Ile Asn His Pro Leu Thr Ile Ser
 20 25 30
 Tyr Phe Ser Leu Arg Val Ile Phe Val Ala Phe Ile Phe Ile Ile Ser
 35 40 45
 Ile Phe Phe Ile Phe Leu Arg Thr Thr Asn Tyr Glu Leu Ile Leu Ser
 50 55 60
 Ile Leu Ser Thr Val Phe Ala Phe Ile His Ile Gly Leu Ile Ile His
 65 70 75 80
 Ser Ala Tyr Leu Tyr Leu Tyr
 85

<210> 6478
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6478
 Cys Ile Asn Tyr Leu Val Lys Tyr Lys Gly Val Asn Lys His Ala Gln
 1 5 10 15
 Thr Ser Thr Ser Glu Tyr Ser Phe Lys Gln Thr Asp Ser Cys Ser Asn
 20 25 30
 Phe Asp Cys Ile Gly Tyr Glu Arg Leu
 35 40

<210> 6479
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6479
 Arg Tyr Ile Tyr Ser Asp Val Leu Thr Asn Ile Ala Gln Leu Val Phe
 1 5 10 15
 Leu Leu Glu Glu Leu Asp Val Glu Asn Leu Ser Glu Leu Leu Ser Arg
 20 25 30
 Leu Asn Ser Gly Tyr Ile Leu Gln Ile
 35 40

<210> 6480
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 6480
 Leu Cys His Leu Lys Asn Ser Val Lys Arg Ile Arg Arg Val Leu Ser
 1 5 10 15
 Cys Ile Tyr Phe Ala Thr Lys Gln Ile His Asp Met Tyr Leu Lys Asp

6477 = 6478 = 6479 = 6480

20 25 30
 Ile Asn Lys Leu Glu Thr Pro Tyr Asp Thr Ile Ala Thr Ile His Ile
 35 40 45
 Val Ser
 50

<210> 6481
 <211> 122
 <212> PRT
 <213> S.epidermidis

<400> 6481
 Arg Ser Ala His Met Asn Lys Ala Leu Val Ile Arg Ala Ile Lys Phe
 1 5 10 15
 Ser Leu Ile Phe Met Thr Ala Phe Leu Ile Leu Asn Leu Leu Thr Met
 20 25 30
 Lys Glu Ala Ser Ile Ser Ser Ile Ile Val Arg Thr Val Ile Ala Ala
 35 40 45
 Ile Val Phe Phe Val Ile Tyr Ile Ile Val Phe Thr Ile Leu Ser Ser
 50 55 60
 Ser Glu Arg Lys Ile Ile Tyr Gly Thr Thr Leu Pro Ile Ala Leu Phe
 65 70 75 80
 Ile Cys Leu Ile Phe Gly Ala Ile Phe Phe Thr Pro Arg Ile Gly Ile
 85 90 95
 Ile Ala Gly Leu Ile Ile Gly Val Phe Ala Gly Val Ile Trp Glu Phe
 100 105 110
 Leu Asn Arg Lys Asn Gly Gly Arg Ser Ser
 115 120

<210> 6482
 <211> 69
 <212> PRT
 <213> S.epidermidis

<400> 6482
 Cys Gly Tyr His Lys Ile Lys Ser Leu Leu Ile Lys Arg Leu Ile Asp
 1 5 10 15
 Ser Lys Pro Asn Lys Lys Ile Met Arg Asn Tyr Ser Trp Glu Tyr Phe
 20 25 30
 Asn Ala Gln Ile Lys Lys Ser Phe Gln Asn Gln Asn Lys Thr Ile Tyr
 35 40 45
 Ser Gln Ser Lys Ile Asp Val Glu Pro Asp Phe Gly Phe Ser Leu Val
 50 55 60
 Cys Pro Phe Glu Gly
 65

<210> 6483
 <211> 119
 <212> PRT
 <213> S.epidermidis

<400> 6483
 Leu Phe Asn His Met Gly Gly Phe Met Asn Tyr Leu Glu Ile Ser Leu
 1 5 10 15
 His Ile Glu Gln Gln Leu Val Lys Leu Leu Ser Leu Ser Glu Asn Ala
 20 25 30

6481 6482 6483

290

295

<210> 6485
 <211> 213
 <212> PRT
 <213> S.epidermidis

<400> 6485

Arg	Trp	Gly	Gln	Val	Met	Glu	Asn	Asn	Glu	Leu	Gln	Arg	Gly	Leu	Asn
1				5					10					15	
Ala	Arg	Gln	Met	Gln	Met	Ile	Ala	Leu	Gly	Gly	Thr	Ile	Gly	Val	Gly
		20						25					30		
Leu	Phe	Met	Gly	Ala	Thr	Ser	Thr	Ile	Lys	Trp	Thr	Gly	Pro	Ser	Val
		35					40					45			
Ile	Leu	Ala	Tyr	Leu	Ile	Ala	Gly	Ile	Phe	Leu	Phe	Leu	Ile	Met	Arg
	50					55					60				
Ala	Met	Gly	Glu	Met	Ile	Tyr	Ile	Asn	Pro	Thr	Thr	Gly	Ser	Phe	Ala
65					70					75				80	
Thr	Phe	Ala	Ser	Asp	Tyr	Ile	His	Pro	Ala	Ala	Gly	Tyr	Met	Thr	Ala
				85					90					95	
Trp	Ser	Asn	Val	Phe	Gln	Trp	Val	Val	Val	Gly	Met	Ser	Glu	Val	Ile
			100					105					110		
Ala	Val	Gly	Glu	Tyr	Met	Asn	Tyr	Trp	Phe	Pro	Ser	Leu	Pro	Asn	Trp
		115					120					125			
Ile	Pro	Gly	Val	Ile	Ala	Val	Leu	Phe	Leu	Met	Ala	Ala	Asn	Leu	Val
	130					135					140				
Ser	Val	Lys	Ala	Phe	Gly	Glu	Phe	Glu	Phe	Trp	Phe	Ala	Leu	Ile	Lys
145					150					155				160	
Val	Val	Thr	Ile	Val	Leu	Met	Ile	Ile	Ala	Gly	Leu	Arg	Leu	Ile	Leu
				165					170					175	
Phe	Gly	Ile	Gly	Asn	Gly	Gly	Asn	Pro	Ile	Gly	Ile	Ser	Asn	Leu	Trp
			180					185					190		
Ser	His	Gly	Gly	Phe	Met	Pro	Asn	Gly	Phe	Ile	Gly	Phe	Phe	Phe	Ala
		195					200					205			
Leu	Ser	Ile	Val	Ile											
		210													

<210> 6486
 <211> 288
 <212> PRT
 <213> S.epidermidis

<400> 6486

Ala	Arg	Arg	Leu	Thr	Glu	Arg	Val	Asn	Leu	Met	Ala	Glu	Gln	Arg	Trp
1				5					10					15	
Thr	Gly	Gln	Leu	Asp	Leu	Thr	Val	Phe	Asn	Asn	Gly	Gln	Ser	Ser	Lys
		20						25					30		
Ala	Arg	Asn	Ile	Phe	Phe	Glu	Lys	Ala	Leu	Lys	Val	Leu	Arg	Pro	Ile
		35					40					45			
Tyr	Leu	Glu	Gln	Ser	Pro	Val	Pro	Thr	Phe	Tyr	Ile	Val	Asn	Val	Gly
	50					55					60				
Gly	Gly	Tyr	Leu	Asp	Gly	Asp	Arg	Tyr	Arg	Val	Asn	Val	Asn	Leu	Glu
65					70					75				80	
Asp	Asn	Ala	Gln	Val	Thr	Leu	Thr	Ser	Gln	Gly	Ala	Thr	Lys	Ile	Tyr
				85					90					95	
Lys	Thr	Pro	Asn	Asp	His	Val	Glu	Gln	Tyr	Gln	Thr	Phe	Asn	Leu	Ser

Asn	Gln	Ser	Tyr	Met	Glu	Phe	Val	Ala	Asp	Pro	Ile	Ile	Ala	Tyr	Glu
		115						120					125		
Asn	Ala	Lys	Phe	Phe	Gln	His	Asn	Thr	Phe	Asn	Leu	Lys	Glu	Asp	Ser
	130					135					140				
Ala	Met	Phe	Tyr	Thr	Asp	Ile	Leu	Thr	Pro	Gly	Tyr	Ser	Ser	Asn	Gly
145					150					155					160
Gln	Asp	Phe	Thr	Tyr	Asn	Tyr	Met	His	Leu	Ile	Asn	Glu	Ile	Tyr	Ile
				165					170					175	
Asp	Asn	Gln	Leu	Val	Val	Phe	Asp	Asn	Met	Met	Leu	Ser	Pro	Asp	Lys
		180						185					190		
Ser	Arg	Leu	Asp	Gly	Ile	Gly	Tyr	Met	Glu	Asn	Tyr	Thr	His	Leu	Gly
		195					200					205			
Ser	Ala	Tyr	Phe	Ile	His	Pro	Asp	Val	Asn	Gln	Ser	Phe	Ile	Glu	Asp
	210					215					220				
Ile	Tyr	Thr	Ala	Val	Ala	Asp	Phe	Gln	Lys	Gln	Tyr	Asp	Cys	Arg	Ile
225					230					235					240
Gly	Ile	Thr	Gln	Leu	Pro	Thr	His	Gly	Leu	Ala	Val	Arg	Ile	Leu	Thr
				245					250					255	
Lys	Arg	Thr	Gln	Ile	Ile	Glu	Glu	Ile	Leu	Thr	Arg	Val	Gln	Ser	Tyr
			260					265					270		
Ile	Asn	Gln	Thr	Ile	Tyr	His	Arg	Gln	Ile	Asn	Phe	Leu	Arg	Lys	Tyr
		275					280					285			

<210> 6487

<211> 128

<212> PRT

<213> S.epidermidis

<400> 6487

Thr	Leu	Leu	Gln	Gln	Asp	Val	His	Gln	Arg	Ser	Gly	Phe	Ile	Met	Gly
1				5					10					15	
Lys	Ile	Lys	Asp	Ile	Asn	Asp	Leu	Val	Asn	Ala	Thr	Phe	Gln	Val	Lys
			20					25					30		
Lys	Phe	Phe	Arg	Asp	Thr	Lys	Lys	Gln	Tyr	Asn	Leu	Asn	Tyr	Glu	Glu
		35					40					45			
Ile	Tyr	Ile	Leu	Asn	His	Ile	Leu	Lys	Ser	Glu	Ser	Asn	Glu	Ile	Ser
	50					55					60				
Ser	Lys	Glu	Ile	Ala	Thr	Cys	Ser	Glu	Phe	Lys	Pro	Tyr	Tyr	Leu	Thr
65					70					75				80	
Lys	Ala	Leu	Gln	Lys	Leu	Lys	Asp	Leu	Asn	Leu	Leu	Ser	Lys	Lys	Arg
				85				90					95		
Ser	Val	His	Asp	Glu	Arg	Thr	Val	Ile	Val	Phe	Val	Ser	Asp	Glu	Gln
			100					105					110		
Arg	Glu	Lys	Ile	Lys	Lys	Leu	Ile	Leu	Glu	Leu	Glu	Asn	Tyr	Ile	Lys
		115					120					125			

<210> 6488

<211> 55

<212> PRT

<213> S.epidermidis

<400> 6488

Lys	Ser	Lys	His	Val	Asn	Asn	Phe	Leu	Asn	Gln	Phe	Ala	Val	His	Leu
1				5					10					15	
Ile	Asn	Ile	Thr	Ile	Phe	Gly	Gly	Val	Lys	Tyr	Tyr	Glu	Lys	Asn	Gln

Thr Pro Pro Asn Ile Ile Lys Thr Thr Ile Lys Lys Ile Ala Asn Leu
 1 5 10 15
 Leu Pro Asn Glu Asn Cys Asn Asn Phe Leu Ile Ile His Phe Phe Leu
 20 25 30
 Ser Tyr Lys Lys Ser Glu Arg Ser Gln Phe Ile Tyr Arg Ser Val Gln
 35 40 45
 Ile

<210> 6492

<211> 324

<212> PRT

<213> S.epidermidis

<400> 6492

Val Ile His Lys Lys Thr Leu Gly Val Ser Thr Met Thr Lys Val Tyr
 1 5 10 15
 Phe Asn His Asp Gly Gly Val Asp Asp Leu Val Ser Leu Phe Leu Leu
 20 25 30
 Leu Gln Met Glu Asn Ile Glu Leu Val Gly Val Ser Thr Ile Gly Ala
 35 40 45
 Asp Cys Tyr Leu Glu Pro Ser Leu Ser Ala Ser Leu Lys Ile Ile Asn
 50 55 60
 Arg Phe Ser Asp Val Glu Ile Asn Val Ala Pro Ser Tyr Glu Arg Gly
 65 70 75 80
 Lys Asn Pro Phe Pro Lys Glu Trp Arg Met His Ala Phe Phe Met Asp
 85 90 95
 Ala Leu Pro Val Leu Asn Glu Ser Cys Ile Pro Lys Arg Cys Lys Ala
 100 105 110
 Ser Glu Asp Glu Ala Tyr Ile Asp Ile Ile Arg Lys Val Lys Ser Cys
 115 120 125
 Asp Glu Lys Val Thr Leu Leu Phe Thr Gly Pro Leu Thr Asp Leu Ala
 130 135 140
 Lys Ala Ile Lys Tyr Asp Asn Ser Ile Leu Lys Asn Ile Glu Lys Leu
 145 150 155 160
 Val Trp Met Gly Gly Thr Phe Leu Asp Lys Gly Asn Val Glu Glu Pro
 165 170 175
 Glu His Asp Gly Thr Ala Glu Trp Asn Ala Phe Trp Asp Pro Glu Ala
 180 185 190
 Val Lys Val Val Leu Asp Ser Asp Met Ile Val Asp Ile Val Ala Leu
 195 200 205
 Glu Ser Thr Asn Gln Val Pro Leu Thr Met Glu Val Arg Gln Met Trp
 210 215 220
 Ala Asp Lys Arg Gln Tyr Leu Gly Val Asp Phe Leu Gly Thr Ser Tyr
 225 230 235 240
 Ala Ala Val Pro Pro Leu Thr His Phe Val Thr Asn Ser Thr Tyr Phe
 245 250 255
 Leu Trp Asp Val Leu Thr Thr Ala Tyr Val Gly Ser Pro Asn Leu Val
 260 265 270
 Glu Ser Thr Lys Leu Lys Ile Asp Val Val Ser Gln Gly Pro Ser Gln
 275 280 285
 Gly Arg Thr Phe Gln Ser Glu Asn Gly Arg Glu Val Gln Val Ile Thr
 290 295 300
 Asp Val Asn Lys Gln Ala Phe Phe Lys Tyr Ile Thr Asp Leu Ala Lys
 305 310 315 320
 Lys Ile Glu Thr

<210> 6493
 <211> 368
 <212> PRT
 <213> S.epidermidis

<400> 6493

Tyr	Lys	His	Lys	Asn	Leu	Val	Lys	Arg	Gly	Lys	Lys	Met	Lys	Ile	Ala
1				5					10					15	
Ile	Val	Gly	Ser	Gly	Asn	Gly	Ala	Val	Thr	Ala	Ala	Val	Asp	Met	Val
			20					25					30		
Asp	Lys	Gly	His	Asp	Val	Arg	Leu	Tyr	Cys	Arg	Asn	Glu	Ser	Ile	Ser
		35					40					45			
Lys	Phe	Asp	Val	Ala	Leu	Glu	Lys	Gly	Gly	Phe	Asp	Phe	Tyr	Asn	Glu
	50					55					60				
Gly	Glu	Glu	Lys	Phe	Ile	Glu	Phe	Thr	Asp	Ile	Ser	Asp	Asp	Met	Glu
65					70					75				80	
Tyr	Val	Leu	Asp	Gly	Ala	Asp	Ile	Val	Gln	Val	Ile	Ile	Pro	Ser	Ser
				85					90					95	
Phe	Ile	Glu	Tyr	Tyr	Ala	Lys	Val	Met	Ser	Lys	Phe	Val	Thr	Asn	Asp
			100					105						110	
His	Leu	Ile	Phe	Phe	Asn	Ile	Ala	Ala	Ser	Met	Gly	Ser	Ile	Arg	Phe
		115					120					125			
Met	Asn	Val	Leu	Glu	Asp	Arg	His	Ile	Asp	Val	His	Pro	His	Phe	Ala
	130					135					140				
Glu	Ala	Asn	Thr	Leu	Thr	Tyr	Gly	Thr	Arg	Val	Asp	Phe	Asn	Asn	Ala
145					150					155					160
Lys	Val	Asp	Leu	Ser	Leu	Asn	Val	Arg	Arg	Val	Phe	Phe	Ser	Thr	Phe
				165					170					175	
Asp	Arg	Ser	Glu	Leu	Asn	Glu	Ser	Tyr	Glu	Lys	Val	Ser	Lys	Ile	Tyr
			180					185					190		
Asp	Tyr	Leu	Val	Lys	Glu	Glu	Ser	Leu	Leu	Lys	Thr	Asn	Leu	Glu	Asn
		195					200					205			
Gly	Asn	Pro	Glu	Val	His	Pro	Gly	Pro	Thr	Leu	Leu	Asn	Val	Gly	Arg
	210					215						220			
Ile	Asp	Tyr	Ser	Glu	Glu	Phe	Ser	Leu	Tyr	Lys	Glu	Gly	Ile	Thr	Lys
225					230					235				240	
His	Thr	Val	Arg	Leu	Leu	His	Ala	Ile	Glu	Ile	Glu	Arg	Leu	Asn	Leu
				245					250					255	
Gly	Arg	Lys	Leu	Gly	Phe	Glu	Leu	Ser	Thr	Ala	Lys	Glu	Ser	Arg	Ile
			260					265					270		
Gln	Arg	Gly	Tyr	Leu	Glu	Arg	Lys	Asp	Glu	Asp	Glu	Pro	Leu	Asn	Arg
	275						280					285			
Leu	Phe	Asn	Thr	Ser	Pro	Val	Phe	Ser	Gln	Ile	Pro	Gly	Pro	Asn	His
	290					295					300				
Val	Glu	Asn	Arg	Tyr	Leu	Thr	Glu	Asp	Ile	Ala	Tyr	Gly	Leu	Val	Leu
305					310					315					320
Trp	Ser	Ser	Leu	Gly	Arg	Val	Ile	Asp	Val	Pro	Thr	Pro	Asn	Ile	Asp
				325					330					335	
Ala	Val	Ile	Met	Ile	Ala	Ser	Thr	Ile	Leu	Glu	Arg	Asp	Phe	Phe	Glu
			340					345					350		
Glu	Gly	Leu	Thr	Ile	Glu	Glu	Leu	Gly	Leu	Asp	Lys	Leu	Gly	Leu	Glu
		355					360					365			

<210> 6494

<211> 263
 <212> PRT
 <213> S.epidermidis

<400> 6494

Leu	Ile	Asn	Asn	Asn	Glu	Val	Asp	Glu	Ala	Met	Phe	Met	Ser	Lys	Ile
1			5					10						15	
Thr	Phe	Lys	Asp	Ile	Tyr	Ile	Asp	Gly	Asn	Lys	Ile	Thr	Glu	Asp	Thr
		20					25					30			
Arg	Lys	Val	Ile	Tyr	Leu	Leu	Pro	Ser	Gln	Pro	Leu	Lys	Tyr	Ala	Ser
		35					40					45			
Asn	Thr	Trp	Ile	Tyr	Lys	Thr	Met	Pro	Thr	Met	Asn	Gln	Trp	Leu	Lys
	50					55					60				
Asp	Ile	Glu	Val	Gln	Lys	Lys	Met	His	Leu	Asn	Gln	Ser	Ser	Tyr	His
65					70				75						80
Leu	Ser	Phe	Ser	Phe	Pro	Ala	Asn	Glu	Lys	Ile	Asp	Glu	Val	Leu	Leu
			85						90					95	
Glu	Lys	Ile	Arg	Glu	Leu	Gly	Phe	Gln	Ile	Gly	Val	Leu	Glu	Leu	Tyr
			100					105					110		
Val	Ile	Glu	Ala	Lys	Ala	Leu	Lys	Glu	Leu	Ser	Arg	Lys	Arg	Asp	Val
		115					120					125			
Asp	Ile	Gln	Leu	Val	Ser	Ser	Asn	Asn	Ile	Asn	Asp	Tyr	Leu	His	Val
	130					135					140				
Tyr	Asp	Val	Phe	Ala	Arg	Pro	Phe	Gly	Asp	Ser	Tyr	Ala	Asn	Met	Val
145					150					155					160
Lys	Gln	His	Ile	Tyr	Ser	Ser	Tyr	Asn	Leu	Asp	Asp	Ile	Glu	Arg	Leu
			165					170						175	
Val	Ala	Tyr	Val	Asn	Gln	Gln	Pro	Val	Gly	Ile	Val	Asp	Thr	Ile	Met
			180					185					190		
Thr	Asp	Lys	Thr	Ile	Glu	Ile	Asp	Gly	Phe	Gly	Val	Leu	Glu	Glu	Phe
		195					200					205			
Gln	His	Gln	Gly	Ile	Gly	Ser	Glu	Ile	Gln	Ala	Tyr	Val	Gly	His	Met
	210					215					220				
Ala	Asn	Glu	Arg	Pro	Val	Ile	Leu	Val	Ala	Asp	Gly	Glu	Asp	Thr	Ala
225					230					235					240
Lys	Asp	Met	Tyr	Leu	Arg	Gln	Gly	Tyr	Val	Tyr	Gln	Gly	Phe	Lys	Tyr
			245					250						255	
His	Ile	Leu	Lys	Glu	Asn	Ile									
			260												

<210> 6495
 <211> 405
 <212> PRT
 <213> S.epidermidis

<400> 6495

Ser	Asn	Asp	Lys	Gly	Gly	Ala	Val	Met	Asn	Gln	Ser	Thr	Ile	Ile	Lys
1			5						10					15	
Asp	Pro	Ile	Phe	Thr	Lys	Ser	Phe	Asn	Ile	Asn	Phe	Ala	Ile	Asn	Phe
		20					25					30			
Phe	Val	Tyr	Leu	Cys	Met	Tyr	Leu	Leu	Ile	Val	Val	Ile	Ala	Ser	Tyr
		35					40					45			
Ser	Lys	Ser	Glu	Tyr	His	Ala	Ser	Asp	Ser	Val	Ala	Gly	Leu	Val	Val
	50					55					60				
Gly	Leu	Phe	Ile	Val	Gly	Ser	Leu	Ile	Gly	Arg	Phe	Val	Thr	Gly	Lys
65					70				75						80

Tyr Val Asn Arg Phe Gly Pro Lys Lys Ile Leu Ile Phe Gly Leu Ile
 85 90 95
 Cys Leu Val Val Thr Gln Leu Leu Tyr Phe Ile Pro Gly Ser Val Trp
 100 105 110
 Phe Leu Met Met Val Arg Leu Leu Asn Gly Leu Ala Thr Ala Val Ala
 115 120 125
 Thr Thr Ala Thr Gly Thr Ile Ala Ala Tyr Ile Thr Pro Pro Thr Arg
 130 135 140
 Lys Ser Glu Gly Ile Ser Leu Phe Ser Leu Ser Leu Val Leu Gly Thr
 145 150 155 160
 Ala Ile Gly Pro Phe Phe Gly Met Leu Leu Met Asn Ser Phe Ser Ile
 165 170 175
 Asn Ile Leu Phe Thr Ile Cys Val Ile Leu Gly Val Ile Ser Gly Leu
 180 185 190
 Leu Ser Leu Leu Ile Lys Ile Asn Phe Thr Thr Val Lys Glu Asn Thr
 195 200 205
 Ile Thr His Lys Arg Phe Asn Leu Ala His Phe Val Ala Lys Glu Ala
 210 215 220
 Ile Pro Val Ala Phe Val Met Leu Leu Ile Gly Val Thr Tyr Ala Ala
 225 230 235 240
 Ile Leu Thr Tyr Leu Gln Ala Phe Ala Val Glu Arg Asp Leu Val Thr
 245 250 255
 Ser Ala Ser Tyr Phe Phe Ile Phe Tyr Ala Ile Ala Ser Leu Ile Thr
 260 265 270
 Arg Pro Ile Ala Gly Arg Leu Met Asp Asp Lys Asn Glu Asn Val Val
 275 280 285
 Val Tyr Pro Ala Phe Ile Phe Leu Val Leu Ser Phe Val Leu Leu Met
 290 295 300
 Leu Ser Phe Asn Gly Trp Val Leu Leu Ile Ala Gly Ile Ala Leu Gly
 305 310 315 320
 Ile Gly Tyr Gly Asn Leu Ser Ser Cys Met Gln Ala Ile Ala Ile Lys
 325 330 335
 Val Ser Pro Ser Asn Lys Tyr Gly Leu Ala Thr Ser Thr Tyr Phe Ile
 340 345 350
 Gly Leu Asp Ile Gly Ile Gly Phe Gly Pro Ser Leu Leu Gly Leu Phe
 355 360 365
 Thr His Met Ile Ser Tyr Ser Gln Leu Tyr Gly Ile Met Gly Ile Leu
 370 375 380
 Gly Phe Ala Thr Leu Val Ile Tyr Ile Phe Val His Gly Arg Lys Val
 385 390 395 400
 Tyr Ser Thr Ser Tyr
 405

<210> 6496

<211> 190

<212> PRT

<213> S.epidermidis

<400> 6496

Asn Leu Cys Lys Glu Asp Glu Gln Val Thr Thr Lys His Leu Val Tyr
 1 5 10 15
 Thr Ala Leu Met Thr Ala Ile Ile Cys Ile Leu Gly Leu Val Pro Ser
 20 25 30
 Val Pro Leu Pro Phe Met Pro Val Pro Ile Val Leu Gln Asn Ile Gly
 35 40 45
 Ile Phe Leu Ala Gly Ile Ile Leu Gly Arg Lys Leu Gly Thr Thr Ser

50		55		60
Val Ile Val Phe Leu	Leu Leu Val Ala Thr Gly	Leu Pro Val Leu Ser		
65	70	75	80	
Gly Gly Arg Gly Gly	Ile Gly Val Phe Ala Gly	Pro Ser Ala Gly Phe		
	85	90	95	
Leu Phe Leu Tyr Pro	Val Val Ala Tyr Phe	Ile Gly Ile Ile Arg Asp		
	100	105	110	
Ala Tyr Leu His Lys	Ile Asn Phe Leu Val	Ile Phe Ile Ala Thr Leu		
	115	120	125	
Val Ile Gly Val Leu	Gly Leu Asp Ile Leu	Gly Thr Leu Ile Met Gly		
	130	135	140	
Phe Ile Ile His Ile	Pro Ile Ser Lys Ala	Phe Ile Leu Ser Phe Thr		
145	150	155	160	
Phe Met Pro Gly Asp	Ile Ile Lys Ala Ile	Ile Ala Ser Leu Ile Gly		
	165	170	175	
Ala Ala Ile Leu Asn	His Ser Arg Phe Lys	Thr Leu Ile Gln		
	180	185	190	

<210> 6497

<211> 551

<212> PRT

<213> S.epidermidis

<400> 6497

Ile Lys Ser Asn Lys	Asp Lys His Ile Leu	Val Ile Ile Ile Lys Gly		
1	5	10	15	
Ser Gly Arg Tyr Ser	Lys Met Asn Ala Ile	Lys Arg Phe Gly Ser Ala		
	20	25	30	
Met Ile Val Pro Val	Leu Met Phe Ala Phe	Phe Gly Ile Val Leu Gly		
	35	40	45	
Phe Ala Thr Leu Phe	Lys Asn Pro Thr Ile	Met Gly Gly Leu Ala Asp		
	50	55	60	
Gln Gln Thr Phe Trp	Phe Lys Phe Trp Ser	Val Ile Glu Ser Gly Gly		
65	70	75	80	
Trp Val Ile Phe Thr	His Met Glu Ile Val	Phe Val Val Gly Leu Pro		
	85	90	95	
Leu Ser Leu Ala Lys	Lys Ala Pro Gly His	Ala Ala Leu Ala Ala Leu		
	100	105	110	
Met Gly Tyr Leu Met	Phe Asn Thr Phe Ile	Asn Ala Ile Leu Thr Gln		
	115	120	125	
Trp Pro His Thr Phe	Gly Ala Asn Leu Lys	Lys Gly Val Glu Asn Thr		
	130	135	140	
Thr Gly Leu Lys Ser	Ile Ala Gly Ile Glu	Thr Leu Asp Thr Asn Ile		
145	150	155	160	
Leu Gly Ala Ile Ile	Ile Ser Gly Ile Ile	Thr Trp Ile His Asn Arg		
	165	170	175	
Tyr Tyr Ser Lys Arg	Leu Pro Glu Met Leu	Gly Val Phe Gln Gly Leu		
	180	185	190	
Thr Phe Val Val Thr	Ile Ser Phe Phe Val	Met Leu Pro Val Ala Ala		
	195	200	205	
Ile Thr Cys Val Val	Trp Pro Thr Ile Gln	His Gly Ile Ala Ser Ile		
	210	215	220	
Gln Tyr Phe Ile Val	Ala Ser Gly Tyr Ile	Gly Val Trp Leu Tyr His		
225	230	235	240	
Phe Leu Glu Arg Val	Leu Ile Pro Thr Gly	Leu His His Phe Ile Tyr		
	245	250	255	

Ala Pro Ile Glu Val Gly Pro Val Val Val Asn His Gly Leu Lys Ala
 260 265 270
 Glu Trp Leu Gln His Leu Asn Gln Phe Ala Glu Ser Asn Lys Pro Leu
 275 280 285
 Lys Glu Gln Phe Pro Tyr Gly Phe Met Leu Gln Gly Asn Gly Lys Val
 290 295 300
 Phe Gly Cys Leu Gly Ile Ala Leu Ala Met Tyr Ala Thr Thr Pro Lys
 305 310 315 320
 Glu Asn Arg Lys Lys Val Ala Ala Leu Leu Ile Pro Ala Thr Leu Thr
 325 330 335
 Ala Val Val Ala Gly Ile Thr Glu Pro Leu Glu Phe Thr Phe Leu Phe
 340 345 350
 Ile Ala Pro Phe Leu Phe Val Leu His Ala Leu Leu Ala Ala Thr Met
 355 360 365
 Asp Thr Leu Met Tyr Gly Phe Gly Val Val Gly Asn Met Gly Gly Gly
 370 375 380
 Val Leu Asp Phe Ile Ala Thr Asn Trp Ile Pro Leu Gly Lys Ala His
 385 390 395 400
 Trp Met Thr Tyr Val Phe Gln Val Val Ile Gly Leu Ile Phe Val Ala
 405 410 415
 Ile Tyr Tyr Phe Leu Phe Lys Tyr Leu Ile Leu Lys Phe Asp Ile Pro
 420 425 430
 Leu Pro Gly Arg Lys Lys Gly Glu Glu Glu Val Lys Leu Phe Ser Lys
 435 440 445
 Gln Asp Tyr Lys Asp Lys Lys Gly Asp Ser Thr Arg Asn His Ser Pro
 450 455 460
 Asn Ser Glu Tyr Glu Glu Lys Ala Met Tyr Tyr Leu Glu Gly Leu Gly
 465 470 475 480
 Gly Lys Glu Asn Ile Lys Asp Val Thr Asn Cys Thr Thr Arg Leu Arg
 485 490 495
 Leu Thr Val Lys Asp Glu Ser Lys Val Gln Glu Ser Ala Tyr Phe Thr
 500 505 510
 His Asn Gln Met Ser His Gly Leu Val Lys Ser Gly Lys Ser Val Gln
 515 520 525
 Val Val Val Gly Met Ser Val Pro Gln Val Arg Glu Ala Phe Glu Asn
 530 535 540
 Ile Val Asn Asp Asp Leu Ser
 545 550

<210> 6498

<211> 244

<212> PRT

<213> S.epidermidis

<400> 6498

Asn Pro Ile Lys Leu Asn Lys Phe Leu Lys Asn Ile Asn Phe Leu Tyr
 1 5 10 15
 Lys Glu Phe Arg Ala Met Pro Asp Leu Thr Ser Phe Trp Ile Ser Phe
 20 25 30
 Arg Val Ala Leu Ile Ser Thr Met Ile Val Thr Ile Phe Gly Ile Leu
 35 40 45
 Ile Ser Lys Trp Leu Tyr Asn Lys Asn Arg Tyr Trp Val Asn Leu Leu
 50 55 60
 Glu Ser Phe Ile Ile Leu Pro Ile Val Leu Pro Pro Thr Val Leu Gly
 65 70 75 80
 Phe Ile Leu Leu Ile Ile Phe Ser Thr Arg Ser Pro Val Gly Glu Phe


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      115              120              125
Val Ser Leu Asp Ala Ile Glu Asp Asn Val Phe Gln Glu Ile Asn Asn
 130              135              140
Arg Asn Ile Lys Ala Ser Thr Ile Leu Glu Gln Ile Asp Tyr Ala Ile
 145              150              155              160
Ser Ile Gly Phe Glu Val Lys Val Asn Val Val Ile Gln Lys Gly Val
      165              170              175
Asn Asp Asn Gln Ile Ile Pro Met Ile Asp Tyr Phe Lys Asn Lys Asn
      180              185              190
Ile Glu Val Arg Phe Ile Glu Phe Met Asp Val Gly Asn Asp Asn Gly
      195              200              205
Trp Asn Phe Asn Lys Val Val Thr Lys Glu Glu Met Leu Asn Met Ile
      210              215              220
Glu Gln His Phe Glu Ile Ser Pro Val Thr Pro Lys Tyr Tyr Gly Glu
 225              230              235              240
Val Ala Lys Tyr Phe Arg His Lys Asp Asn Asp Ala Gln Phe Gly Leu
      245              250              255
Ile Thr Ser Val Ser Glu Ser Phe Cys Ser Thr Cys Thr Arg Ala Arg
      260              265              270
Leu Ser Ser Asp Gly Lys Phe Tyr Gly Cys Leu Phe Ala Ser Ser Glu
      275              280              285
Gly Phe Asp Val Lys Ala Leu Ile Arg Ser Gly Ala Thr Asp Asp Asp
      290              295              300
Leu Lys Ala Gln Phe Lys Arg Leu Trp Ser Ile Arg Asn Asp Gln Tyr
 305              310              315              320
Ser Asp Asn Arg Thr Met Gln Thr Ile Glu Asn Asn Arg Lys Lys Lys
      325              330              335
Ile Asn Met Asn Tyr Ile Gly Gly
      340

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<210> 6501
<211> 56
<212> PRT
<213> S.epidermidis

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<400> 6501
Ile Ile Lys Asn Thr Tyr Arg Ile Ile Phe Ser His Met Ser Ser Ser
 1              5              10              15
Arg Cys Pro Ser Val Tyr Leu Lys Leu Asn Phe Ser Pro Ile Ala Lys
      20              25              30
Leu Asn Leu Thr Arg Gln His Leu Phe Phe Ser Val Tyr Tyr Thr Thr
      35              40              45
Leu Glu Lys Leu Val Val Thr Asn
      50              55

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<210> 6502
<211> 1051
<212> PRT
<213> S.epidermidis

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<400> 6502
Met Ile Lys Lys Leu Leu Gln Phe Ser Leu Gly Asn Lys Phe Ala Ile
 1              5              10              15
Phe Leu Met Val Val Leu Ile Ile Leu Gly Gly Val Tyr Ser Ser Ala
      20              25              30
Lys Leu Lys Leu Glu Leu Leu Pro Asp Val Glu Asn Pro Val Ile Ser

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				485					490					495			
Arg	Pro	Phe	Ala	Leu	Ala	Ile	Thr	Phe	Ser	Leu	Leu	Ala	Ser	Leu	Leu		
			500					505					510				
Val	Ser	Ile	Thr	Leu	Val	Pro	Ser	Leu	Gly	Ala	Thr	Phe	Phe	Lys	Asn		
		515					520					525					
Gly	Val	Lys	Asn	Arg	Glu	Gln	Lys	Glu	Gly	Leu	Gly	Thr	Val	Gly	Arg		
		530				535					540						
Ala	Tyr	Arg	Ser	Ala	Leu	Asn	Trp	Ser	Leu	Asn	His	Lys	Trp	Ile	Val		
545					550					555					560		
Leu	Ile	Val	Ser	Ile	Phe	Ile	Leu	Val	Gly	Ser	Val	Val	Ile	Gly	Ala		
			565						570					575			
Arg	Asn	Leu	Gly	Thr	Ser	Tyr	Ile	Ser	Thr	Gly	Asp	Asn	Lys	Phe	Leu		
		580						585					590				
Ala	Leu	Thr	Tyr	Thr	Pro	Lys	Pro	Gly	Glu	Thr	Gln	Lys	Ser	Val	Thr		
		595					600					605					
Gln	His	Ala	Glu	Lys	Val	Gln	Asn	Tyr	Leu	Asp	Lys	Lys	Asp	Lys	Val		
	610					615					620						
Glu	Thr	Val	Gln	Tyr	Ser	Ile	Gly	Gly	Pro	Thr	Pro	Gln	Asp	Pro	Thr		
625					630					635					640		
Gly	Ser	Thr	Asn	Ser	Met	Ala	Ile	Met	Ile	Lys	Tyr	Gln	Ser	Asp	Thr		
			645					650						655			
Pro	Asn	Phe	Asp	Glu	Glu	Pro	Asp	Lys	Val	Leu	Lys	His	Ile	Glu	Thr		
		660					665						670				
Phe	Lys	Gln	Pro	Gly	Glu	Trp	Lys	Asn	Gln	Asp	Leu	Gly	Thr	Gly	Ala		
		675					680					685					
Gly	Asn	Asn	Ser	Val	Glu	Val	Thr	Val	Lys	Gly	Pro	Asn	Thr	Ser	Ala		
	690					695					700						
Met	Lys	Asp	Thr	Val	Asn	Arg	Val	Glu	Lys	Met	Met	Thr	Asp	Ile	Lys		
705					710					715					720		
Gly	Ile	Thr	Asn	Val	Lys	Ser	Asp	Leu	Ser	Gln	Thr	Tyr	Asp	Gln	Tyr		
			725						730					735			
Glu	Ile	Lys	Val	Asp	Gln	Asn	Lys	Ala	Ala	Asp	Asn	Gly	Ile	Ser	Ala		
			740					745					750				
Ala	Gln	Leu	Ala	Met	Asn	Leu	Asn	Glu	Asn	Leu	Pro	Glu	Lys	Thr	Ile		
		755					760					765					
Ser	Thr	Val	Asn	Glu	Lys	Gly	Lys	Ser	Ile	Asp	Val	Lys	Val	Lys	Gln		
	770					775					780						
Asn	Lys	Gln	Thr	Asp	Trp	Ser	Ser	Gln	Lys	Ile	Lys	Asn	Ile	Lys	Leu		
785					790					795					800		
Asn	Lys	Pro	Thr	Gly	Gly	Thr	Ile	Lys	Leu	Ser	Glu	Ile	Ala	Ser	Leu		
			805						810					815			
Lys	Lys	Ser	Tyr	Thr	Pro	Ser	Lys	Leu	Thr	Gln	Glu	Asp	Gly	Asp	Tyr		
		820						825					830				
Ala	Thr	Thr	Val	Thr	Gly	Lys	Val	Thr	Asp	Lys	Asp	Val	Gly	Gly	Lys		
		835					840					845					
Ser	Gln	Gln	Val	Met	Ala	Lys	Val	Lys	Asp	Leu	Glu	Lys	Pro	Ser	His		
		850				855					860						
Ile	Lys	Ile	Asn	Val	Gly	Gly	Ala	Thr	Asp	Asp	Ile	Asp	Lys	Ala	Ile		
865					870					875					880		
Ser	Gln	Leu	Ala	Met	Ala	Met	Ile	Ala	Ala	Ile	Ile	Ile	Val	Tyr	Leu		
			885						890					895			
Ile	Leu	Val	Ile	Thr	Phe	Arg	Gly	Gly	Leu	Ala	Pro	Phe	Thr	Ile	Leu		
		900						905					910				
Phe	Ser	Leu	Pro	Phe	Thr	Val	Ile	Gly	Val	Val	Leu	Ala	Leu	Ile	Ile		
		915					920					925					
Thr	Gly	Glu	Thr	Ile	Ser	Val	Pro	Ser	Leu	Ile	Gly	Met	Leu	Met	Leu		

Ile Asp Asn Lys Ile Lys Lys Thr Asn Glu Leu Lys Ser Asp Leu Thr
 275 280 285
 Glu Leu Glu Lys Ser Glu Pro Glu Gly Ile Tyr Leu Ser Gly Ala Leu
 290 295 300
 Leu Met Phe Ala Gly Asn Lys Ser Tyr Tyr Leu Tyr Gly Ala Ser Ser
 305 310 315 320
 Asn Asp Tyr Arg Asp Phe Leu Pro Asn His His Met Gln Phe Glu Met
 325 330 335
 Met Lys Tyr Ala Arg Glu His Gly Ala Thr Thr Tyr Asp Phe Gly Gly
 340 345 350
 Thr Asp Asn Asp Pro Asp Lys Asp Ser Glu His Tyr Gly Leu Trp Ala
 355 360 365
 Phe Lys Arg Val Trp Gly Thr Tyr Leu Ser Glu Lys Ile Gly Glu Phe
 370 375 380
 Asp Tyr Val Leu Asn Gln Pro Leu Tyr His Leu Val Glu Lys Val Lys
 385 390 395 400
 Pro Arg Leu Thr Lys Ala Lys Ile Lys Ile Ser Arg Lys Leu Lys Gly
 405 410 415
 Lys

<210> 6504
 <211> 231
 <212> PRT
 <213> S.epidermidis

<400> 6504
 Leu Ser Leu Asn Lys Leu Glu Arg Gln Asn Arg Ile Ile Gln Thr Ile
 1 5 10 15
 Gln Ser Ser Asp Lys Ile Thr Ala Ser Gln Leu Ala Lys Gln Phe Asn
 20 25 30
 Val Ser Lys Arg Thr Ile Leu Arg Asp Ile Asp Glu Leu Glu Asp Gln
 35 40 45
 Gly Val Lys Val Tyr Ala Arg His Gly Lys Leu Gly Gly Tyr Gln Ile
 50 55 60
 Lys Asp Ala His Ala Lys Ile Thr Leu Ser Leu Thr Glu Gln Gln Leu
 65 70 75 80
 Ser Ala Leu Phe Leu Thr Leu Asn Glu Ser Gln Ser Asn Ser Thr Leu
 85 90 95
 Pro Tyr Gln Asn Glu Ile Arg Ala Ile Ile Lys Gln Cys Leu Asn Leu
 100 105 110
 Pro Gln Thr Arg Leu Arg Lys Met Leu Lys Lys Met Asp Tyr Tyr Ile
 115 120 125
 Lys Phe Glu Asp Ser Asn His Val Thr Leu Pro Gln Leu Phe Ser Asp
 130 135 140
 Ile Leu Ile Tyr Cys Thr Glu Arg Asn Val Met Leu Val Asp Leu Asn
 145 150 155 160
 Glu Asn Asn Gln Ile Gln Ala Glu Asn Val Ile Phe Ile Gly Leu Ile
 165 170 175
 Cys Lys Asn Ala Val Trp His Ala Val Val Phe Glu Ile Gly Arg Gly
 180 185 190
 Tyr Thr Arg Glu Leu Ser Ile Leu Asp Ile Gln Asp Ile Ser Tyr Ser
 195 200 205
 Phe Glu Lys Thr Ile Gln Thr Gln Asp Ile Ser Ile Glu Asn Tyr Arg
 210 215 220
 Gln Phe Leu Ala Pro Ser Glu

225

230

<210> 6505
 <211> 263
 <212> PRT
 <213> S.epidermidis

<400> 6505

Ala Ile Met Lys Ile Lys His Ile Phe Ile Ile Ile Leu Thr Leu Cys
 1 5 10 15
 Val Val Leu Ala Gly Cys Thr Asn Glu Lys Gly Gln Asn Lys Glu Gln
 20 25 30
 Asn Glu Lys Gln Ser Thr Lys Gly Asp Lys Gln Glu Leu Gln Val Ser
 35 40 45
 Ala Ala Ala Ser Leu Thr Glu Val Ser Lys Ala Leu Gly Asn Glu Phe
 50 55 60
 Lys Lys Asp His Pro Asn Val Glu Ile Lys Phe Asn Tyr Gly Gly Ser
 65 70 75 80
 Gly Ala Leu Arg Gln Gln Ile Glu Ala Gly Ala Pro Ser Asp Val Met
 85 90 95
 Met Ser Ala Asn Thr Lys Asp Ile Asp Leu Leu Lys Lys Lys Asn Lys
 100 105 110
 Ala His Asp Thr Tyr Asn Tyr Ala Lys Asn Gln Leu Val Leu Ile Gly
 115 120 125
 Asp Lys Asn Lys Ser Tyr Thr Ser Val Lys Asp Leu Asn Gln Asn Asp
 130 135 140
 Lys Leu Ala Leu Gly Gln Ile Lys Thr Val Pro Ala Gly Lys Tyr Ala
 145 150 155 160
 Lys Gln Tyr Leu Asp Asp Gln His Leu Tyr Gly Asp Val Lys Asp Lys
 165 170 175
 Ile Ile Phe Ala Lys Asp Val Lys Gln Val Leu Asn Tyr Val Glu Lys
 180 185 190
 Gly Asn Ala Gln Glu Gly Phe Val Tyr Lys Thr Asp Leu Tyr Gln Gln
 195 200 205
 Lys Lys Lys Ala Asn Lys Val Lys Val Ile Glu Glu Ile Lys Leu Ser
 210 215 220
 Lys Pro Ile Thr Tyr Lys Ala Gly Ala Thr Ser Asp Lys Lys Leu Ala
 225 230 235 240
 Lys Glu Trp Ile Asn Phe Leu Lys Ser Asn Lys Ala Lys Gln Ile Leu
 245 250 255
 Lys Glu Tyr Gln Phe Ser Val
 260

<210> 6506
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 6506

Met Val Met Asn Leu Ser Leu Leu Ser Ile Asn Trp Cys Ile Gln Gln
 1 5 10 15
 His Lys His Lys Lys Ser Tyr Glu Asp Ile Glu Leu Ser Leu Tyr Leu
 20 25 30
 His Ser Ser Leu Phe Ile Lys Met Thr Ala Phe Leu Ile Phe Asn Phe
 35 40 45
 Ile Ile

50

<210> 6507

<211> 50

<212> PRT

<213> S.epidermidis

<400> 6507

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Met Thr Lys Lys Thr Ile Ala Ala Met Thr Val Arg Thr Ile Ile Asp
1          5          10          15
Asp Ile Glu Ala Ser Phe Ile Val Asn Lys Leu Arg Ile Lys Asn Ala
20          25          30
Val Ile Asn Ile Lys Glu Asn Leu Ile Ala Arg Ile Thr Ser Ala Leu
35          40          45
Phe Ile
50

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<210> 6508

<211> 163

<212> PRT

<213> S.epidermidis

<400> 6508

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Arg Arg Ile Asp Thr Met Ile Leu Gln Ile Val Gly Met Lys Asn Ser
1          5          10          15
Gly Lys Thr Thr Leu Met Asn His Ala Ile Ser Phe Leu Lys Glu Arg
20          25          30
Gly Tyr Ser Val Ala Thr Ile Lys His His Gly His Ile Gly Glu Glu
35          40          45
Ile Glu Leu Gln Ser Ser Asp Val Asp His Met Lys His Phe Ala Ala
50          55          60
Gly Ala Asp Gln Ser Ile Val Gln Gly His His Leu Gln Gln Thr Val
65          70          75          80
Thr Arg Lys Lys Lys Gln Ser Leu Arg Glu Ile Ile Glu Asn Ser Val
85          90          95
Thr Ile Asp Tyr Ser Ile Ile Leu Val Glu Gly Phe Lys Glu Ala Asn
100         105         110
Tyr Asp Lys Ile Ile Val Tyr Lys Asn Asn Asp Glu Leu Arg Ser Leu
115         120         125
Gln Gly Leu Ser His Val Ile Gly Lys Ile Glu Thr Asn His Pro Arg
130         135         140
Ala Asn Asn Gln Leu Glu His Leu Leu Asn Lys Leu Ile Lys Asp Lys
145         150         155         160
Gly Met Asn

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<210> 6509

<211> 262

<212> PRT

<213> S.epidermidis

<400> 6509

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Glu Leu Val Glu Met Leu Lys Asn Thr Arg Leu Arg Met Thr Thr Leu
1          5          10          15
Phe Ile Ile Ser Ile Leu Val Ile Leu Ala Ile Leu Phe Leu Ile Phe
20          25          30

```

Asp Thr Asn Leu Phe Lys Asn Asp Val Lys His Thr Phe Lys Glu Ala
 35 40 45
 Val Ser Leu Gln Thr Ser Glu Gly Asn Ile His Thr Lys Glu Val Asn
 50 55 60
 Gly Lys Phe Ile Tyr Ala Ser Lys Gln Asp Ile Glu Lys Ala Met Gln
 65 70 75 80
 Ile Lys His Ser Asp Asn Asp Leu Lys Tyr Met Asp Ile Ser Glu Lys
 85 90 95
 Val Pro Met Ser Glu Lys Glu Val Asn His Ile Leu Lys Gly Lys Gly
 100 105 110
 Ile Leu Glu Asn Lys Gly Ser Thr Phe Ile Lys Ala Gln Asp Lys Tyr
 115 120 125
 Glu Val Asn Ile Leu Tyr Leu Ile Ser His Ala Leu Val Glu Thr Gly
 130 135 140
 Asn Gly Gln Ser Asp Leu Ser Lys Gly Ile Lys Glu Gly Asn Tyr His
 145 150 155 160
 Tyr Tyr Asn Phe Phe Gly Ile Gly Ala Phe Asp Glu Asp Ala Val Lys
 165 170 175
 Thr Gly Lys Ser Phe Ala Lys Gln Lys Lys Trp Thr Thr Pro Glu Lys
 180 185 190
 Ala Ile Met Gly Gly Ala Trp Phe Val Arg Tyr His Tyr Phe Lys Asn
 195 200 205
 Asn Gln Leu Ser Leu Tyr Gln Met Arg Trp Asn Pro Gln Asn Pro Gly
 210 215 220
 Gln His Gln Tyr Ala Ser Asp Ile Gln Trp Ala Asn Asn Ile Ala Asp
 225 230 235 240
 Leu Met Glu Lys Tyr Tyr Asp Lys Tyr Gly Ile Lys Lys Asp His Ile
 245 250 255
 Arg Lys Lys Tyr Tyr Lys
 260

<210> 6510
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 6510
 Tyr Asn Tyr Asp Lys Leu Phe Ser His Ile Asp Ser Phe Phe Leu Val
 1 5 10 15
 Tyr Thr Asn Glu Tyr Phe Asp Ile Val Ser His Leu Phe Arg Ser Ile
 20 25 30
 Val Phe Arg Asp Ile Ile Phe Ile Lys Cys Lys Asn Tyr Tyr Tyr
 35 40 45

<210> 6511
 <211> 208
 <212> PRT
 <213> S.epidermidis

<400> 6511
 Glu Ala Tyr Glu Met Ser Asn Pro Ile Lys Ile Gly Ile Gly Gly Pro
 1 5 10 15
 Val Gly Ala Gly Lys Thr Gln Leu Ile Glu Lys Val Val Lys Arg Leu
 20 25 30
 Ala Lys Glu Met Ser Ile Gly Val Ile Thr Asn Asp Ile Tyr Thr Lys
 35 40 45

Glu Asp Glu Lys Ile Leu Val Asn Thr Gly Val Leu Pro Glu Asp Arg
 50 55 60
 Ile Ile Gly Val Glu Thr Gly Gly Cys Pro His Thr Ala Ile Arg Glu
 65 70 75 80
 Asp Ala Ser Met Asn Phe Ala Ala Ile Asp Glu Leu Leu Glu Arg Asn
 85 90 95
 Asp Asp Ile Glu Leu Ile Phe Ile Glu Ser Gly Gly Asp Asn Leu Ala
 100 105 110
 Ala Thr Phe Ser Pro Glu Leu Val Asp Phe Ser Ile Tyr Ile Ile Asp
 115 120 125
 Val Ala Gln Gly Glu Lys Ile Pro Arg Lys Gly Gly Gln Gly Met Ile
 130 135 140
 Lys Ser Asp Phe Phe Ile Ile Asn Lys Thr Asp Leu Ala Pro Tyr Val
 145 150 155 160
 Gly Ala Ser Leu Asp Gln Met Ala Lys Asp Thr Glu Val Phe Arg Gly
 165 170 175
 Asn Arg Pro Phe Ala Phe Thr Asn Leu Lys Thr Asp Glu Gly Leu Glu
 180 185 190
 Lys Val Ile Glu Trp Ile Glu His Asp Val Leu Leu Lys Gly Leu Thr
 195 200 205

<210> 6512
 <211> 150
 <212> PRT
 <213> S.epidermidis

<400> 6512
 Tyr Asp Asn Glu Val Leu Asn Ile Leu Thr Asn Glu Phe Phe Asn Ser
 1 5 10 15
 Phe Ile Gly Ile Tyr Arg Pro Tyr Ile Lys Leu Thr Gln Pro Ile Leu
 20 25 30
 Asp Gln His Gln Ile His Thr Gly Gln Trp Leu Val Leu Arg Asp Ile
 35 40 45
 Ala Asn Tyr Gln Pro Thr Thr Leu Val Lys Ile Ser His Arg Arg Ser
 50 55 60
 Ile Glu Lys Pro Thr Thr Arg Lys Leu Ile Lys Val Leu Leu Asp Asn
 65 70 75 80
 Gly Trp Val Met Thr Lys Thr Gly Val Asp Lys Arg Glu Lys Leu Leu
 85 90 95
 Ser Leu Thr Asp Lys Gly Gln Ile Leu Phe Glu Thr Ile Asn Lys Lys
 100 105 110
 Val Thr Val Ile Gln Gln Asp Ile Ile Lys Lys Thr Gly Leu Thr Asp
 115 120 125
 Glu Gln Val Phe Asp Ile Thr Asn Ala Met Ser Gln Ile His Glu Ala
 130 135 140
 Met Ile Lys Glu Glu Gln
 145 150

<210> 6513
 <211> 276
 <212> PRT
 <213> S.epidermidis

<400> 6513
 Asn Glu Gly Glu Ile Met Thr Glu Leu Tyr Leu Lys Lys Leu Asp Glu
 1 5 10 15

Tyr Ile Cys Gln Trp Ile Arg Gly Leu Asp Asp Ile Ile Pro Arg Leu
 20 25 30
 Val Glu Lys Met Glu Thr Ser Thr Lys Lys Asp Arg Phe Asp Leu Val
 35 40 45
 Thr Asn Val Asp Lys Gln Ile Gln Asn His Phe Gln Asn Phe Leu Gln
 50 55 60
 Glu His Tyr Pro Thr His Gln Leu Leu Ala Glu Glu Lys Asp Asn Ser
 65 70 75 80
 Asp Ile Thr Pro Tyr Glu Gly His Leu Trp Ile Met Asp Pro Ile Asp
 85 90 95
 Gly Thr Ser Asn Leu Val Lys Gln Gln Glu Asp Tyr Cys Ile Ile Ile
 100 105 110
 Gly Tyr Phe Ile Asp Gly Glu Pro Lys Leu Ser Tyr Ile Tyr Asp Tyr
 115 120 125
 Pro His Gln Arg Leu Tyr Arg Ala Ile Ala Gly Ile Gly Ala Tyr Glu
 130 135 140
 Asn Asn Gln Leu Met Thr Met Pro Lys Arg Ile Gly Leu Arg Glu Ala
 145 150 155 160
 Ile Ile Ser Phe Lys Pro Gln Val Leu Lys Glu Glu Thr Val Gln Ser
 165 170 175
 Leu Phe Gln Ser Ala Phe Asp Phe Arg Ser Ile Gly Ser Cys Gly Leu
 180 185 190
 Asp Ser Ile Arg Val Ile Lys Gly Gln Phe Gly Ala His Ile Asn Thr
 195 200 205
 Asn Pro Lys Pro Trp Asp Ile Ser Ala Gln Phe Leu Phe Ala Arg Glu
 210 215 220
 Leu Gly Leu Ile Met Thr Gln Ile Asn Gly Glu Pro Leu Asp Phe Ser
 225 230 235 240
 Lys Ala Gly Pro Phe Ile Ile Ser Asn Pro Gly Cys Tyr Asp Asp Met
 245 250 255
 Ile Arg Ile Leu Asn Glu Gly Gly Gly Tyr Ser Lys Ser Ser His His
 260 265 270
 Ile Glu Arg Gly
 275

<210> 6514

<211> 270

<212> PRT

<213> S.epidermidis

<400> 6514

Leu Lys Leu Asp Phe Val Lys Met Ser Asn Asn Met Trp Arg Gly Ile
 1 5 10 15
 Lys Leu Asn Leu Lys Leu Asp His Ile Ile His Tyr Ile His Gln Leu
 20 25 30
 Glu Ser Phe Lys Phe Pro Gly Glu Ile Leu Glu Leu Gln Asn Gly Gly
 35 40 45
 Arg His His His Leu Gly Thr Phe Asn Gln Ile Ala Pro Ile Lys Asn
 50 55 60
 Ser Tyr Ile Glu Leu Leu Asp Val Glu Asn Glu Ser Lys Leu Asn Asn
 65 70 75 80
 Val Ala Lys Thr Glu Glu Gly Arg Val Ser Phe Ala Thr Lys Ile Val
 85 90 95
 Gln Asp His Phe Lys Gln Gly Phe Lys Gly Ile Cys Phe Arg Thr Lys
 100 105 110
 Asp Ile Asp Gln Val Lys Ser Ser Leu Glu Asn Arg Gly Val Asp Val

115	120	125
Ile Gly Pro Ile Asp Met Glu Arg Glu Asn Lys Lys Gly His Gln Leu		
130	135	140
Ser Trp Arg Leu Leu Tyr Ile Ala Asn Pro Asp Tyr Arg Val Lys Pro		
145	150	155
Pro Phe Phe Ile Glu Trp Asp Asn Ser Lys Lys Gln Asn Leu Ser Gln		
	165	170
Ile His Asn Phe Asn Leu Ser Ser Phe Lys Ile Lys Glu Val Ile Ile		
	180	185
Thr Ser Thr Gln Arg Glu Thr Thr Val Ser Leu Trp Lys Glu Trp Tyr		
	195	200
Asn Leu Lys Ile Val Asn Glu Thr Ala Thr Ser Thr Asp Leu Lys Leu		
	210	215
Glu Thr Asp Glu Val Ile Tyr Lys Ile Glu Asp Gly Lys Asp Ser Gly		
225	230	235
Phe His Thr Leu Ile Met Thr Asp Ile Asn Ala Thr Ala Pro Tyr Ser		
	245	250
Ile Phe Ile Arg Gly Ala Lys Tyr Arg Phe Glu Pro Pro Asn		
	260	265
		270

<210> 6515
 <211> 55
 <212> PRT
 <213> S.epidermidis

<400> 6515
 Ile Lys Lys Asp Ser Ile Thr Phe Thr Pro Pro Met Thr His Phe Ile
 1 5 10 15
 Leu Asn Leu Ile Ile His Ser Leu Thr Leu Asp Phe Ile Phe Ser Lys
 20 25 30
 Phe Thr Asn Gly Thr Ser Tyr Ala Phe Pro Ser Asp Ile Glu Lys Leu
 35 40 45
 Thr Ile Asn Ile Tyr Ile Thr
 50 55

<210> 6516
 <211> 64
 <212> PRT
 <213> S.epidermidis

<400> 6516
 Pro Phe Glu Glu Glu Asn Asp Thr Met Asp Leu Asn Ser Lys Leu Ser
 1 5 10 15
 Glu Leu Lys Tyr Asp Tyr Thr Arg Leu Gln Asn Asp Leu Glu Lys Arg
 20 25 30
 Glu Ser Leu His Gln Asp Ile Asp Pro Leu Leu Lys Gln Leu Glu Asn
 35 40 45
 Ile Glu Gln Glu Ile Ser Tyr Ile Arg Ser Lys Leu Asn Gln Gln Ser
 50 55 60

<210> 6517
 <211> 249
 <212> PRT
 <213> S.epidermidis

<400> 6517

Leu Arg Lys Asp Tyr His Gln Met Gln Gln Gln Lys Ile Lys Arg Phe
 1 5 10 15
 Leu Ala His Phe Val Leu Asp His Val Thr Ile Glu Tyr Leu Lys Tyr
 20 25 30
 Gly His Gln Leu Thr Ile Glu Gln Leu Lys Leu Leu Ile Phe Ile Leu
 35 40 45
 His Phe Thr Glu Asn His Lys Glu Asp Leu Ser Leu Asn Met Ile Ile
 50 55 60
 Phe Tyr Lys Asn Tyr Gln Lys Asn Gln Leu Leu Lys Ser Ile Thr His
 65 70 75 80
 Leu Tyr Glu Phe Asn Trp Ile Ser Lys Lys Arg His Pro Tyr Asp Gln
 85 90 95
 Arg Arg Leu Val Ile Thr Leu Thr Gln Asn Gln Cys Ser Lys Ile Thr
 100 105 110
 Gln Leu Ile Asp Glu Leu Glu His Phe Leu Glu Val Lys Ser Thr Leu
 115 120 125
 Ile Asn Glu Ile Asn His Ser Thr Leu Leu Ser Tyr Tyr Leu Lys Cys
 130 135 140
 His Ser Gln Phe Arg Val Ile Glu Gln Ser Cys Thr Ser Gln His Leu
 145 150 155 160
 Thr Leu Glu Glu Leu Tyr Leu Leu Gly Leu Leu Ile Val Ser Asp Asn
 165 170 175
 Lys Thr Thr Phe Lys Ser Ile Lys Val His Ala Leu Lys Gly Ile Ile
 180 185 190
 Ala Met Gly Pro Ile Ile Lys Thr Leu Gln Ser Lys Gly Tyr Leu Ile
 195 200 205
 Lys Ser Arg Ser Arg Asp Asp Glu Arg Tyr Ile Val Leu Thr Leu Arg
 210 215 220
 Lys Glu Lys Ile Asn Val Ile Gln Ser Glu Ile Glu Glu Cys Tyr Asn
 225 230 235 240
 Lys Leu Glu Gln Gly Ile Gln His Val
 245

<210> 6518
 <211> 70
 <212> PRT
 <213> S.epidermidis

<400> 6518
 Arg Met Asn Trp Arg Tyr Ser Lys Met Gly Tyr Ile Ile Leu Phe Phe
 1 5 10 15
 Ile Ala Gly Pro Val Ile Ile Gly Val Gly Asn Leu Ile Leu Gly Pro
 20 25 30
 Ile Phe Asn Lys Arg Thr Pro Leu His Val Gln Phe Arg Ser Phe Ile
 35 40 45
 Ile Gly Ser Leu Val Tyr Leu Ile Leu Ala Thr Ile Cys Tyr Phe Leu
 50 55 60
 Phe Leu Gln Gly Lys Leu
 65 70

<210> 6519
 <211> 261
 <212> PRT
 <213> S.epidermidis

<400> 6519

Leu Phe Ala Leu Ser Tyr Phe Thr Ile Leu Phe Ile Lys Glu Gly Val
 1 5 10 15
 Met Val Met Thr Lys Val Tyr Ile Ala Gly Ala Ile Pro Glu Val Gly
 20 25 30
 Leu Asn Leu Leu Lys Glu His Phe Glu Val Asp Met Tyr Asp Gly Glu
 35 40 45
 Gly Leu Ile Asp Lys Glu Thr Leu Lys Lys Gly Val Glu His Ala Asp
 50 55 60
 Ala Leu Val Ser Leu Leu Ser Thr Ser Val Asp Lys Asp Ile Ile Asp
 65 70 75 80
 Ser Ala Asn Asn Leu Lys Ile Ile Ala Asn Tyr Gly Ala Gly Phe Asn
 85 90 95
 Asn Ile Asp Val Glu Tyr Ala Arg Gln Asn Ile Asp Val Thr Asn
 100 105 110
 Thr Pro His Ala Ser Thr Asn Ala Thr Ala Asp Leu Thr Ile Gly Leu
 115 120 125
 Ile Leu Ser Val Ala Arg Arg Ile Val Glu Gly Asp His Leu Ser Arg
 130 135 140
 Thr Thr Gly Phe Asp Gly Trp Ala Pro Leu Phe Phe Arg Gly Arg Glu
 145 150 155 160
 Val Ser Gly Lys Thr Ile Gly Ile Ile Gly Leu Gly Glu Ile Gly Gly
 165 170 175
 Ala Val Ala Lys Arg Ala Arg Ala Phe Asp Met Asp Val Leu Tyr Thr
 180 185 190
 Gly Pro His Arg Lys Glu Glu Lys Glu Arg Asp Ile Gly Ala Lys Tyr
 195 200 205
 Val Asp Leu Asp Thr Leu Leu Lys Asn Ala Asp Phe Ile Thr Ile Asn
 210 215 220
 Ala Ala Tyr Asn Pro Ser Leu His His Met Ile Asp Thr Glu Gln Phe
 225 230 235 240
 Asn Lys Met Lys Ser Thr Ala Tyr Leu Ile Asn Ala Gly Arg Gly Pro
 245 250 255
 Ile Val Asn Glu Gln Ser Leu Val Glu Ala Leu Asp Asn Lys Val Ile
 260 265 270
 Glu Gly Ala Ala Leu Asp Val Tyr Glu Phe Glu Pro Glu Ile Thr Asp
 275 280 285
 Ala Leu Lys Ser Phe Lys Asn Val Val Leu Thr Pro His Ile Gly Asn
 290 295 300
 Ala Thr Phe Glu Ala Arg Asp Met Met Ala Lys Ile Val Ala Asn Asp
 305 310 315 320
 Thr Ile Lys Lys Leu Asn Gly Asp Glu Pro Gln Phe Ile Val Asn
 325 330 335

<210> 6522

<211> 182

<212> PRT

<213> S.epidermidis

<400> 6522

Tyr Asn Tyr Ser Cys Ile Lys Ser Phe Phe Leu Gln Met Glu Val Lys
 1 5 10 15
 Pro Ile Met Asp Lys His Thr Asn Tyr Asn Glu Leu Glu Ser Lys Asn
 20 25 30
 Val Ser Asp Gln Thr Ser Ser Asp Asn Leu Ser Asn Asp Asn Ile Val
 35 40 45
 His Gln Gln Ser Thr Ile Gln Asn Glu Glu Ser Gln Asp Asn Arg Leu

50 55 60
 Met Ala Met Leu Ile Tyr Leu Leu Ser Leu Phe Thr Gly Ile Ile Gly
 65 70 75 80
 Pro Leu Ile Ile Trp Leu Ile Lys Arg Lys Glu Ser Arg Leu Val Asp
 85 90 95
 Val Ser Gly Lys Thr Tyr Leu Asn Tyr Phe Ile Ser Tyr Thr Ile Tyr
 100 105 110
 Ser Thr Val Gly Val Ile Cys Met Phe Met Ile Val Pro Leu Met Asn
 115 120 125
 Ile Ser Glu Ser Leu Ala Ile Phe Ser Leu Ile Leu Leu Leu Val Val
 130 135 140
 Val Phe Ile Leu Leu Ala Leu Leu Ile Met Ser Phe Val Cys Thr Ile
 145 150 155 160
 Ile Ala Cys Val Lys Tyr Met Ser Gly Lys Thr Tyr Thr Ile Pro Leu
 165 170 175
 Thr Ile Pro Phe Ile Lys
 180

<210> 6523

<211> 53

<212> PRT

<213> S.epidermidis

<400> 6523

Ser Pro Pro Ser Asn Ile Ile Ile Arg Asn Pro Ile Met Phe Ala Ile
 1 5 10 15
 Ile Glu Thr Ile Pro Ala Phe Leu Glu Pro Ile Lys Ile Pro Ile Arg
 20 25 30
 Ile Asn Lys Pro Pro Ile Met Leu Gly Ile Lys Asn Ile Cys Pro Asn
 35 40 45
 Pro Ser Lys Thr Asp
 50

<210> 6524

<211> 110

<212> PRT

<213> S.epidermidis

<400> 6524

Lys Gly Trp Leu Phe Met Lys Leu Tyr Leu Ile Leu Leu Pro Val Leu
 1 5 10 15
 Tyr Leu Ile Val Ser Tyr Ile Ser Ile Phe Lys Met His Ser Val Ile
 20 25 30
 Thr Arg Ile Leu Arg Ile Val Met Gly Ile Leu Leu Leu Phe Val Val
 35 40 45
 Ala Leu Thr Thr Leu Gln Phe Pro Lys Glu Asn Trp Trp Val Phe Val
 50 55 60
 Val Leu Leu Leu Leu Val Gly Asn Val Glu Val Thr Gly Phe Lys Glu
 65 70 75 80
 Leu Lys Asp Asp Lys Lys Gly Val Ser Ile Leu Asn Ile Leu Ser Leu
 85 90 95
 Leu Leu Phe Val Ile Phe Ile Ile Leu Ile Phe Ile Leu Tyr
 100 105 110

<210> 6525

<211> 114

<212> PRT

<213> S.epidermidis

<400> 6525

Cys Asn Glu Arg Arg Glu Ile Lys Ser Met Ala Trp Leu Phe Leu Met
 1 5 10 15
 Ile Ala Gly Ser Phe Glu Ile Leu Gly Val Val Leu Leu Asn Glu Leu
 20 25 30
 Ser Arg Thr Lys Asn Lys Ile Tyr Val Ile Phe Leu Gly Leu Ala Phe
 35 40 45
 Ile Leu Ser Phe Ser Thr Leu Lys Phe Ala Met Val Ser Ile Pro Met
 50 55 60
 Gly Thr Ala Tyr Ala Ile Trp Thr Gly Ile Gly Thr Ala Gly Gly Thr
 65 70 75 80
 Leu Ile Gly Met Ile Phe Tyr Gly Glu Ser Thr Arg Leu Ser Arg Ile
 85 90 95
 Leu Cys Ile Leu Leu Ile Ile Ile Ser Val Val Gly Leu Arg Leu Ile
 100 105 110
 Ser Tyr

<210> 6526

<211> 573

<212> PRT

<213> S.epidermidis

<400> 6526

Ile Ser Met Ser Phe Lys Met Thr Gln Ser Gln Tyr Thr Ser Leu Tyr
 1 5 10 15
 Gly Pro Thr Val Gly Asp Ser Val Arg Leu Gly Asp Thr Asn Leu Phe
 20 25 30
 Ala Gln Val Glu Lys Asp Tyr Ala Asn Tyr Gly Asp Glu Ala Thr Phe
 35 40 45
 Gly Gly Gly Lys Ser Ile Arg Asp Gly Met Ala Gln Asn Pro Asn Val
 50 55 60
 Thr Arg Asp Asp Lys Asn Val Ala Asp Leu Val Leu Thr Asn Ala Leu
 65 70 75 80
 Ile Ile Asp Tyr Asp Lys Ile Val Lys Ala Asp Ile Gly Ile Lys Asn
 85 90 95
 Gly Tyr Ile Phe Lys Ile Gly Lys Ala Gly Asn Pro Asp Ile Met Asp
 100 105 110
 Asn Val Asp Ile Ile Ile Gly Ala Thr Thr Asp Ile Ile Ala Ala Glu
 115 120 125
 Gly Lys Ile Val Thr Ala Gly Gly Ile Asp Thr His Val His Phe Ile
 130 135 140
 Asn Pro Glu Gln Ala Glu Val Ala Leu Glu Ser Gly Ile Thr Thr His
 145 150 155 160
 Ile Gly Gly Gly Thr Gly Ala Ser Glu Gly Ala Lys Ala Thr Thr Val
 165 170 175
 Thr Pro Gly Pro Trp His Ile His Arg Met Leu Glu Ala Ala Glu Glu
 180 185 190
 Met Pro Ile Asn Val Gly Phe Thr Gly Lys Gly Gln Ala Val Asn His
 195 200 205
 Thr Ala Leu Ile Glu Gln Ile His Ala Gly Ala Ile Gly Leu Lys Val
 210 215 220
 His Glu Asp Trp Gly Ala Thr Pro Ser Ala Leu Ser His Ala Leu Asp

225 230 235 240
 Val Ala Asp Glu Phe Asp Ile Gln Val Ala Leu His Ala Asp Thr Leu
 245 250 255
 Asn Glu Ala Gly Phe Met Glu Asp Thr Met Ala Ala Val Lys Asp Arg
 260 265 270
 Val Leu His Met Tyr His Thr Glu Gly Ala Gly Gly Gly His Ala Pro
 275 280 285
 Asp Leu Ile Lys Ser Ala Ala Tyr Ser Asn Ile Leu Pro Ser Ser Thr
 290 295 300
 Asn Pro Thr Leu Pro Tyr Thr His Asn Thr Val Asp Glu His Leu Asp
 305 310 315 320
 Met Val Met Ile Thr His His Leu Asn Ala Ser Ile Pro Glu Asp Ile
 325 330 335
 Ala Phe Ala Asp Ser Arg Ile Arg Lys Glu Thr Ile Ala Ala Glu Asp
 340 345 350
 Val Leu Gln Asp Met Gly Val Phe Ser Met Val Ser Ser Asp Ser Gln
 355 360 365
 Ala Met Gly Arg Val Gly Glu Val Val Thr Arg Thr Trp Gln Val Ala
 370 375 380
 His Arg Met Lys Glu Gln Arg Gly Pro Leu Asp Gly Asp Phe Glu Tyr
 385 390 395 400
 His Asp Asn Asn Arg Ile Lys Arg Tyr Ile Ala Lys Tyr Thr Ile Asn
 405 410 415
 Pro Ala Ile Thr His Gly Ile Ser Asp Tyr Val Gly Ser Val Glu Ala
 420 425 430
 Gly Lys Leu Ala Asp Leu Val Met Trp Glu Pro Glu Phe Phe Gly Ala
 435 440 445
 Lys Pro Asp Leu Val Val Lys Gly Gly Met Ile Asn Ser Ala Val Asn
 450 455 460
 Gly Asp Ala Asn Gly Ser Ile Pro Thr Ser Glu Pro Leu Lys Tyr Arg
 465 470 475 480
 Lys Met Tyr Gly Gln Phe Gly Gly Asn Ile Thr His Thr Ala Met Thr
 485 490 495
 Phe Val Ser Asn Thr Ala Tyr Glu Asn Gly Ile Tyr Arg Gln Leu Asn
 500 505 510
 Leu Lys Arg Met Val Arg Pro Val Arg Asn Ile Arg Asn Leu Thr Lys
 515 520 525
 Ala Asp Met Lys Asn Asn Asn Ala Thr Pro Lys Ile Asp Val Asp Pro
 530 535 540
 Gln Thr Tyr Glu Val Phe Val Asp Gly Asn Lys Ile Thr Ser Glu Ala
 545 550 555 560
 Ala Thr Glu Leu Pro Leu Thr Gln Arg Tyr Phe Leu Phe
 565 570

<210> 6527

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6527

Ser Phe Ile Phe Ser Phe Leu Ile Lys Asn Leu Asn Ala Leu Asn Leu
 1 5 10 15
 Ser Ile Glu Ala Phe Arg Ser Glu Cys Ser Ser Tyr Leu Pro Leu Ser
 20 25 30
 Leu Arg Asp Ile Leu Ile Leu Ala Phe Val Lys Arg Gly Phe Thr Phe
 35 40 45

Ser Thr Lys
50

<210> 6528
<211> 257
<212> PRT
<213> S.epidermidis

<400> 6528

Leu Leu Val Ser Gly Lys Asp Thr Met Met Lys Lys Asp Lys Lys Arg
1 5 10 15
Gln Ser Tyr Arg Phe Lys Asp Ile Val Trp Arg Asp Phe Ser Leu Ile
20 25 30
Ala Ile Gly Phe Leu Cys Ile Phe Ile Phe Ser Phe Ile Gly Leu Thr
35 40 45
Ile Ala Ala Ile Ala Phe Gln Ser Ile Asn Glu Leu Gln Leu Thr Met
50 55 60
Ile Gly Thr Leu Gly Gln Phe Met Ser Tyr Ile Leu Val Ile Leu Ala
65 70 75 80
Phe Tyr Phe Leu His Ile Asn Ser Phe Val Asp Arg Val Lys Ser Gly
85 90 95
Phe Asp Tyr Leu Lys Lys His Trp Leu Phe Ile Ile Ile Val Met Cys
100 105 110
Ala Ser Phe Ile Ile Ser Asn Val Tyr Asp Lys Leu Ile Glu Leu Leu
115 120 125
Pro Lys Tyr Leu Gln Tyr Ser Glu Thr Gln Asn Glu Leu Glu Leu Asn
130 135 140
Glu Leu Phe Lys Ser Gly Ile Phe Ile Pro Phe Ala Phe Val Leu Ile
145 150 155 160
Val Ile Val Gly Pro Ile Val Glu Glu Leu Val Phe Arg His Leu Leu
165 170 175
Ile Gly Glu Leu Gly Lys Lys Phe Asn Phe Ile Val Met Gly Val Ile
180 185 190
Ser Ala Leu Ser Phe Thr Tyr Ile His Val Ser Asp Ala Lys Ser Pro
195 200 205
Phe Glu Phe Gly Ala Tyr Leu Ile Leu Ala Ile Ala Leu Val Tyr Val
210 215 220
Tyr Leu Lys Ser Asn Arg Asn Leu Ala Ser Ser Ile Ser Leu His Met
225 230 235 240
Leu Asn Asn Phe Ile Ser Phe Ile Trp Thr Ile Ile Val Val Phe Ser
245 250 255
Lys

<210> 6529
<211> 68
<212> PRT
<213> S.epidermidis

<400> 6529

Lys Lys Trp Arg Ser Leu Ile Leu Thr Ile Ile Ile Gly Leu Ile Val
1 5 10 15
Ile Ile Leu Leu Ile Ile Ser Leu Leu Pro Asn Tyr Lys Ala Met Val
20 25 30
Leu Ala Lys Gln Gln Gly Gln Lys Pro Thr Arg Tyr Thr Ile Met Val
35 40 45

Gly Ile Asp Leu Leu Leu Ile Ile Leu Ile Ile Val Thr Leu Val Leu
 50 55 60
 Lys Leu Ile Met
 65

<210> 6530
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 6530
 Ile Thr Ile Gly Met Arg Phe His Lys Cys Val Met Leu Leu Ile Ser
 1 5 10 15
 Asp Val His Leu Phe His Gly Leu Lys Tyr Leu Leu Tyr Phe Thr Val
 20 25 30
 Ile Leu Ile Ile His Leu Asn Glu Asn Asp Val Asp Asp Val Thr Phe
 35 40 45
 Lys Pro Phe
 50

<210> 6531
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 6531
 Phe Ile Tyr Gly Ala Asn Ile Gln Val Ile Thr Leu Ala Ile Met Ala
 1 5 10 15
 Leu Ile Pro Thr Phe Gln Phe Thr Ala Asn Ser Pro Ile Lys Met Asn
 20 25 30
 Asn Pro Val Tyr Gly Leu Leu Ile Lys Thr Thr
 35 40

<210> 6532
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 6532
 Ser Ala Phe Gly His Val Ala Phe Val Glu Ser Val Asn Asn Asp Gly
 1 5 10 15
 Ser Ile Thr Val Ser Glu Met Asn Cys Asp Gly Gly Pro Phe Ala Ile
 20 25 30
 Ser Thr Arg Thr Ile Ser Ala Ser Glu Ala Ser Ser Tyr Asn Tyr Ile
 35 40 45
 His Leu Asn
 50

<210> 6533
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6533
 Leu Leu Leu Gly Asn Ile Phe Leu Asn His Leu Leu Asn Thr Thr Ile
 1 5 10 15

6530-6533

Ile Val Gln Met Asn Asp Met Lys Leu Phe Asn Ile Cys Lys Leu Ile
 20 25 30
 Asp Glu Ala Lys Phe Leu Phe Asp Phe Lys
 35 40

<210> 6534
 <211> 46
 <212> PRT
 <213> S.epidermidis

<400> 6534
 Leu Asn Ser Gly Leu Ile Asn Phe Ser Ile Ala Ser Leu Ile Ala Pro
 1 5 10 15
 Val Glu Pro Gly Ser Ala Lys Ile Lys Val Leu Ser Gln Val Pro Ala
 20 25 30
 Ile Ala Arg Val Asn Asn Ala Leu Val Pro Thr Ser Ser Val
 35 40 45

<210> 6535
 <211> 249
 <212> PRT
 <213> S.epidermidis

<400> 6535
 Ser Tyr Gln Gly Val Glu Leu Ile Gly Ile Ser Ala Gly Glu Thr Lys
 1 5 10 15
 Asn Pro Gln Thr Asn Ile Val Lys Ala Val Asn Gly Val Ile Trp Arg
 20 25 30
 Ile Leu Ile Phe Tyr Ile Gly Ala Ile Phe Val Ile Val Ser Val Tyr
 35 40 45
 Pro Trp Asn Gln Leu Gly Ser Ile Gly Ser Pro Phe Val Ala Thr Phe
 50 55 60
 Ala Lys Val Gly Ile Thr Phe Ala Ala Gly Leu Ile Asn Phe Val Val
 65 70 75 80
 Leu Thr Ala Ala Leu Ser Gly Cys Asn Ser Gly Ile Phe Ser Ala Ser
 85 90 95
 Arg Met Ile Tyr Thr Leu Ala Lys Lys Gly Gln Met Pro Lys Val Phe
 100 105 110
 Thr Lys Val Met Lys Asn Gly Val Pro Phe Tyr Thr Val Phe Ala Val
 115 120 125
 Ser Met Gly Ile Leu Ile Gly Ala Leu Leu Asn Val Ile Leu Pro Leu
 130 135 140
 Ile Ile Asp Gly Ala Asp Ser Ile Phe Val Tyr Val Tyr Ser Ala Ser
 145 150 155 160
 Ile Leu Pro Gly Met Ile Pro Trp Phe Met Ile Leu Phe Ser His Leu
 165 170 175
 Arg Phe Arg Arg Leu His Pro Glu Lys Val His Asn His Pro Phe Lys
 180 185 190
 Met Pro Gly Gly Ala Ile Ala Asn Tyr Leu Thr Ile Met Phe Leu Leu
 195 200 205
 Leu Val Leu Val Gly Met Leu Leu Asn Lys Glu Thr Val Val Ser Val
 210 215 220
 Val Ile Gly Ile Val Phe Leu Thr Ala Val Thr Leu Tyr Tyr Leu Ile
 225 230 235 240
 Arg Tyr His Lys Lys Glu Arg Gln Ile
 245

<210> 6536
 <211> 84
 <212> PRT
 <213> S.epidermidis

<400> 6536
 Ser Lys Lys Gly Glu Ser Lys Met Lys Ile Leu Tyr Phe Ala Glu Leu
 1 5 10 15
 Lys Glu Leu Leu Asn Gln Ser Thr Glu Thr Ile His Leu Asp Thr Thr
 20 25 30
 Leu Thr Val Gln Glu Phe Glu Ser Tyr Leu Leu Lys His His Ser Glu
 35 40 45
 Leu Lys Ser Lys Lys Phe Gln Ile Ala Val Asn Glu Glu Phe Val Arg
 50 55 60
 Gln Asp Asp Ile Val Gln Pro Gly Asp Thr Ile Ala Leu Ile Pro Pro
 65 70 75 80
 Val Ser Gly Gly

<210> 6537
 <211> 218
 <212> PRT
 <213> S.epidermidis

<400> 6537
 Ile Leu Lys Gly Asp Asp Asn Met Tyr Lys Ala Val Val Phe Asp Phe
 1 5 10 15
 Asp Gly Thr Val Ile Asp Thr Glu Lys His Leu Phe Asp Leu Ile Asn
 20 25 30
 Thr His Leu Lys Ile His Gln Val Ala Pro Ile Ser Leu Glu Phe Tyr
 35 40 45
 Lys Gln Phe Ile Gly Gly Glu Ala Thr Glu Leu His Thr Tyr Leu Glu
 50 55 60
 Asp Ala Ile Gly Phe Lys Asn Lys Glu Lys Ile Tyr Asp Gln Tyr Tyr
 65 70 75 80
 Gln Thr Ser Val Glu Leu Pro Val Asn Pro Thr Ile Ile Gln Leu Met
 85 90 95
 Gln Tyr Leu Lys Lys Arg His Ile Pro Met Ala Ile Thr Thr Ser Ser
 100 105 110
 Tyr Lys Lys Asn Ile Tyr Pro Ile Phe Lys Gln Leu Gly Leu Asp Thr
 115 120 125
 Tyr Ile Asp Val Val Val Gly Arg Glu Asn Val Asp Ser Val Gln Pro
 130 135 140
 Asn Pro Glu Ile Phe Leu Lys Ala Val Gln Glu Leu Asn Tyr Asn Pro
 145 150 155 160
 Thr Asn Cys Leu Ala Ile Glu Asp Ser Val Asn Gly Ala Thr Ala Ala
 165 170 175
 Met Leu Ala Gly Leu Asp Val Val Val Asn Thr Asn Ile Ile Thr Lys
 180 185 190
 Asn Gln Asp Phe Ser Thr Val Gln Cys Val Gly Gln Asp Met Glu Phe
 195 200 205
 Glu Asp Ile Lys Asn Phe Leu Phe Lys Glu
 210 215

<210> 6538

<211> 125
 <212> PRT
 <213> S.epidermidis

<400> 6538

Tyr	Ile	Arg	Gly	Lys	Leu	Thr	Met	Thr	Asp	Ala	Ile	Thr	Ala	Pro	Val
1				5					10					15	
Lys	Val	Asn	Thr	Thr	Gly	Lys	Cys	Lys	Ile	Leu	Val	Lys	Asn	Ser	Pro
			20					25					30		
Thr	Gly	Leu	Leu	Val	Glu	Asn	Ile	Ile	Asn	Ser	Ile	Lys	Pro	Arg	Thr
		35					40					45			
Val	Gly	Gly	Asn	Thr	Ile	Gly	Lys	Met	Ile	Lys	Leu	Ser	Asn	Arg	Phe
	50					55					60				
Thr	Gln	Tyr	Leu	Phe	Leu	Leu	Tyr	Ser	His	Leu	Glu	Ile	Lys	Met	Pro
65					70					75				80	
Lys	Ile	Val	Thr	Ile	Ile	Val	Leu	Ile	Lys	Ala	Thr	Arg	Lys	Glu	Ile
				85					90					95	
Gln	Lys	Asp	Val	Lys	Ser	Gly	Ile	Ala	Leu	Asn	Ser	Leu	Tyr	Arg	Lys
			100					105					110		
Leu	Ile	Phe	Phe	Lys	Asn	Leu	Phe	Ser	Phe	Ile	Gly	Phe			
		115					120					125			

<210> 6539
 <211> 264
 <212> PRT
 <213> S.epidermidis

<400> 6539

Phe	Ser	Gly	Gly	Tyr	Leu	Thr	Met	Lys	Lys	Ile	Ala	Thr	Ala	Thr	Ile
1				5					10					15	
Ala	Thr	Ala	Gly	Ile	Ala	Thr	Phe	Ala	Phe	Ala	His	His	Asp	Ala	Gln
			20					25					30		
Ala	Ala	Glu	Gln	Asn	Asn	Asp	Gly	Tyr	Asn	Pro	Asn	Asp	Pro	Tyr	Ser
		35					40					45			
Tyr	Ser	Tyr	Thr	Tyr	Thr	Ile	Asp	Ala	Glu	Gly	Asn	Tyr	His	Tyr	Thr
	50					55					60				
Trp	Lys	Gly	Asn	Trp	Ser	Pro	Asp	Arg	Val	Asn	Thr	Ser	Tyr	Asn	Tyr
65					70				75					80	
Asn	Asn	Tyr	Asn	Asn	Tyr	Asn	Tyr	Tyr	Gly	Tyr	Asn	Asn	Tyr	Ser	Asn
			85					90					95		
Tyr	Asn	Asn	Tyr	Asn	Asn	Tyr	Ser	Asn	Tyr	Asn	Asn	Tyr	Gln	Ser	Asn
			100					105					110		
Asn	Thr	Gln	Ser	Gln	Arg	Thr	Thr	Gln	Pro	Thr	Gly	Gly	Leu	Gly	Ala
		115					120					125			
Ser	Tyr	Ser	Thr	Ser	Ser	Ser	Asn	Val	His	Val	Thr	Thr	Thr	Ser	Ala
	130					135					140				
Pro	Ser	Ser	Asn	Gly	Val	Ser	Leu	Ser	Asn	Ala	Arg	Ser	Ala	Ser	Gly
145					150					155					160
Asn	Leu	Tyr	Thr	Ser	Gly	Gln	Cys	Thr	Tyr	Tyr	Val	Phe	Asp	Arg	Val
				165					170					175	
Gly	Gly	Lys	Ile	Gly	Ser	Thr	Trp	Gly	Asn	Ala	Asn	Asn	Trp	Ala	Asn
			180					185					190		
Ala	Ala	Ala	Arg	Ser	Gly	Tyr	Thr	Val	Asn	Asn	Ser	Pro	Ala	Lys	Gly
		195					200					205			
Ala	Ile	Leu	Gln	Thr	Ser	Gln	Gly	Ala	Tyr	Gly	His	Val	Ala	Tyr	Val
	210					215					220				

Glu Gly Val Asn Ser Asn Gly Ser Ile Arg Val Ser Glu Met Asn Tyr
 225 230 235 240
 Gly His Gly Ala Gly Val Val Thr Ser Arg Thr Ile Ser Ala Ser Gln
 245 250 255
 Ala Ala Ser Tyr Asn Tyr Ile His
 260

<210> 6540
 <211> 387
 <212> PRT
 <213> S.epidermidis

<400> 6540
 Val Ile Gly Gly Val Asn Val Met Glu Ser Phe Leu Ile His Thr Asp
 1 5 10 15
 Ile Gln Lys Lys Trp Ile Arg Lys Phe Lys Lys Ile Glu Ser Glu Phe
 20 25 30
 Lys Ala Arg Ala Ala Glu Asn Asp Ile Gln Ser Arg Phe Pro Tyr Glu
 35 40 45
 Asn Ile Glu Trp Leu Ile Lys Glu Gly Tyr Thr Lys Leu Thr Leu Pro
 50 55 60
 Val Glu Tyr Gly Gly Glu Gly Ala Thr Ile Glu Asp Met Val Ile Leu
 65 70 75 80
 Gln Ser Tyr Leu Gly Thr Ile Asp Gly Ala Thr Ala Leu Ser Ile Gly
 85 90 95
 Trp His Leu Ser Val Ile Gly Gln Leu Tyr Glu Gln His Met Trp Thr
 100 105 110
 Pro Ser Met Leu Asp Ser Phe Ala Lys Glu Val Val His Gly Ala Leu
 115 120 125
 Ile Asn Arg Ala Val Ser Glu Ala Glu Thr Gly Ser Pro Thr Arg Gly
 130 135 140
 Gly Arg Pro Ser Thr His Ala Val Lys Ala Glu Asn Gly Tyr Val Ile
 145 150 155 160
 Asn Gly Val Lys Thr Phe Thr Ser Met Ser Lys Ala Leu Thr His Tyr
 165 170 175
 Ile Val Gly Ala Tyr Val Glu Glu Thr Lys Ser Met Gly Phe Phe Leu
 180 185 190
 Ile Pro Gln Ser Thr Lys Gly Val Ser Ile Ala Asp Asn Trp Asp Met
 195 200 205
 Val Gly Met Arg Ala Thr Glu Ser His Asp Leu Ile Leu Asp Asp Val
 210 215 220
 Tyr Val Pro Asn Glu Asn Phe Val Glu Ser Lys Arg Glu Ser Arg Pro
 225 230 235 240
 Asn Gly Trp Leu Leu His Ile Pro Ser Cys Tyr Leu Gly Ile Ala Gln
 245 250 255
 Ala Ala Arg Asp Tyr Ala Val Asp Phe Ala Lys Asn Tyr Arg Pro Asn
 260 265 270
 Ser Ile Thr Gly Thr Ile Asp Ser Leu Pro Thr Val Gln Gln Asn Leu
 275 280 285
 Gly Lys Met Glu Ser Leu Leu Leu Ser Ala Arg His Phe Leu Trp Ser
 290 295 300
 Thr Ala Arg Gly Tyr Gln Ser Tyr Thr Glu Asp Ala Gln Ile Trp Asn
 305 310 315 320
 Glu Thr Ser Ala Ser Lys Val Val Val Met Asn Gln Ser Ile Glu Ile
 325 330 335
 Val Asp Leu Ala Met Arg Ile Val Gly Ala Lys Ser Leu Glu Met Ser

Thr Thr Ser Ile Phe Gln Cys Leu Leu Tyr Asn Ser Arg Lys Ile Ser
 1 5 10 15
 Ser Asn Lys Leu Asp Phe Asn Tyr Ile Asn Phe Leu Leu Tyr Leu Tyr
 20 25 30
 Arg Phe Leu Lys Ile Leu Leu Asn His Ile Ile Lys Ser Thr
 35 40 45

<210> 6544

<211> 305

<212> PRT

<213> S.epidermidis

<400> 6544

Met Glu Ala Ile Lys Leu Lys Leu Ile Lys Val Ile Leu Ser Ser Ile
 1 5 10 15
 Ser Gln Val Val Leu Ile Asn Asn Pro Tyr Thr Gly Leu Phe Ile Leu
 20 25 30
 Ile Gly Leu Phe Ala Val Asn Trp Lys Val Gly Ile Ser Ala Met Ile
 35 40 45
 Ala Ser Val Met Thr Trp Ile Leu Ala Pro Tyr Met Asn Tyr Thr Lys
 50 55 60
 Glu Glu Ile Glu Ser Gly Leu Ala Gly Phe Asn Pro Val Leu Thr Ala
 65 70 75 80
 Ile Ala Leu Thr Leu Phe Leu Asp Ser Asn Trp Ser Gly Ile Leu Ile
 85 90 95
 Thr Phe Val Ala Thr Ile Leu Thr Leu Pro Ile Gly Ala Ala Ile Arg
 100 105 110
 Glu Val Leu Lys Pro His Lys Ile Ala Phe Leu Thr Ser Pro Tyr Val
 115 120 125
 Ile Met Thr Trp Ile Thr Leu Ile Pro Asn Gln Leu Lys Thr Leu
 130 135 140
 His Thr Gln Ile Asp Ile Ile Pro Glu His Ile Glu Lys Val Ser Leu
 145 150 155 160
 Asn Asn Asp His Thr Ser Val His Phe Phe Gln Ser Val Leu Asp Gly
 165 170 175
 Phe Gly Gln Ile Phe Leu Met Pro Ser Ile Ile Gly Gly Leu Leu Ile
 180 185 190
 Leu Ile Gly Ile Phe Ile Gly Ser Lys Lys Ala Gly Ile Val Ser Ile
 195 200 205
 Ile Ala Asn Ile Ile Gly Phe Leu Ile Ile Ile Leu Leu Gly Gly Asp
 210 215 220
 Tyr Ser Ser Ile Asn Glu Gly Ile Phe Gly Tyr Asn Val Val Leu Ser
 225 230 235 240
 Ala Ile Ala Leu Gly Val Thr Phe Glu Thr Ala Ile His Ser Tyr Leu
 245 250 255
 Ala Met Ile Leu Gly Ile Val Leu Thr Ala Phe Ile His Leu Gly Leu
 260 265 270
 Ser Thr Leu Leu Ala Pro Leu Gly Leu Pro Thr Leu Thr Trp Pro Phe
 275 280 285
 Ile Phe Ala Thr Trp Ile Met Leu Phe Ala Gly Ile Lys Asn Gln Thr
 290 295 300

Val

305

<210> 6545

<211> 660

<212> PRT

<213> S.epidermidis

<400> 6545

Gly	Arg	His	Met	Arg	Glu	Asn	Tyr	Ser	Ile	Arg	Val	Phe	Asn	Asn	Leu	1	5	10	15
Ala	Ile	Asn	Thr	Glu	Asn	Ala	Leu	Ser	Val	Lys	Val	Phe	Tyr	Cys	Leu	20	25	30	
Lys	Gly	Lys	Cys	Glu	Val	Thr	Ile	Asn	Val	Gln	Lys	His	Ile	Leu	Glu	35	40	45	
Lys	Asp	Asp	Ile	Ala	Phe	Val	Val	Met	Asn	Asp	Thr	Tyr	Ser	Leu	Leu	50	55	60	
Ser	Asn	Thr	Glu	Thr	Met	Cys	Cys	Ile	Ile	Asp	Ile	Pro	Ile	His	Arg	65	70	75	80
Tyr	Leu	Ser	Gln	Lys	Asp	Thr	Gln	Phe	Leu	Ile	Ser	Gly	Thr	Lys	Ile	85	90	95	
Asp	Glu	Ser	Ser	Arg	Asp	Arg	Ile	Lys	Tyr	Trp	Ile	Leu	Lys	Ile	Leu	100	105	110	
Glu	Leu	His	Cys	Leu	Ser	Tyr	Asn	Asp	Val	Ser	Glu	Ile	Gln	Arg	Leu	115	120	125	
Ile	Gln	Phe	Leu	Leu	Ile	Glu	Leu	Ser	Tyr	Leu	Lys	Lys	Pro	Lys	Leu	130	135	140	
Asp	Val	Asn	Lys	Asp	Phe	Tyr	Leu	Ser	Glu	Asp	Ile	His	Gln	Tyr	Leu	145	150	155	160
Val	Asp	His	His	Asp	Ser	Lys	Ile	Asn	Lys	His	Glu	Leu	Ala	Glu	Ala	165	170	175	
Val	Asn	Leu	Ser	Asn	Gln	Ala	Leu	Thr	Ser	Met	Phe	Lys	Gln	Thr	Pro	180	185	190	
Phe	Gln	Thr	Phe	Asn	Gln	Tyr	Leu	Asn	Gln	Leu	Arg	Leu	Lys	Phe	Cys	195	200	205	
Leu	Ile	Asp	Ile	Leu	Thr	Thr	His	Lys	Pro	Ile	Glu	Glu	Ile	Ala	Ile	210	215	220	
Asp	His	Gly	Phe	His	His	Tyr	Ser	Arg	Phe	Ile	Gln	Leu	Phe	Lys	Asn	225	230	235	240
Thr	Tyr	Gly	Tyr	Thr	Pro	Lys	Leu	Ile	Arg	Arg	Asp	Tyr	Ile	Ala	Thr	245	250	255	
Ser	Ile	Phe	Lys	Asn	Thr	Ala	Glu	Glu	Ile	Asp	Leu	Asp	Arg	His	Phe	260	265	270	
Leu	Met	Asn	Ile	His	Glu	Leu	Gln	Asp	Leu	Asp	Ser	Lys	Ile	Ile	Ser	275	280	285	
Lys	Lys	Tyr	Ile	Lys	Met	Ser	Asp	Lys	Gly	Lys	Lys	Tyr	Arg	Ser	Tyr	290	295	300	
Asp	Ile	Tyr	Ile	Glu	Asp	Asn	Arg	Ser	Thr	Ile	Leu	Asp	Gln	Glu	Gln	305	310	315	320
Ile	Val	His	Ile	Lys	Arg	Asn	Leu	Ser	Leu	Ser	Gln	Lys	Ser	Met	Arg	325	330	335	
Tyr	Val	Ile	Glu	Leu	Asn	Tyr	Thr	Ser	Met	Ile	Glu	Asn	Lys	Glu	Leu	340	345	350	
Cys	Arg	Tyr	Glu	Met	Leu	Lys	Ile	Leu	Arg	Phe	Cys	Ser	Gly	Leu	Asn	355	360	365	
Leu	Ile	Pro	Thr	Phe	Lys	Ile	Thr	Asp	Arg	His	Asp	Thr	Phe	Thr		370	375	380	
Ser	Lys	Glu	Lys	Met	Ala	Leu	Lys	Leu	Thr	Phe	Gln	Met	Leu	Phe	Ile	385	390	395	400
Met	Leu	Arg	Glu	Phe	Asn	Gln	Leu	Glu	Ile	Glu	Phe	Ile	Val	Glu	Asp	405	410	415	

Met Met Leu Lys Gln Val Val Gln Leu Lys Lys Met Ile Ser Ser Tyr
 420 425 430
 Phe Glu Tyr Tyr Lys Leu Asn Tyr Arg Ile Lys Asn Glu Lys Ile Gly
 435 440 445
 Asn Val Asn Tyr Gln Asn Leu Glu Lys Gln Val Thr Gln Ile Phe Ile
 450 455 460
 Pro Ile Asp Gln Leu His Leu Tyr Ile Lys Glu Ile Ser Phe Glu Lys
 465 470 475 480
 Val Ile Leu Glu Thr Ser Tyr Leu Thr Asp Leu Lys Ser Glu Ile Val
 485 490 495
 Glu Tyr Ser Trp Ile Gln His Ile His Thr Leu Ile Lys Met Ser Gly
 500 505 510
 Glu Val Arg Gly Val Leu Ile Gln Pro Ser Tyr Asp Tyr Ala Ala Thr
 515 520 525
 Tyr Thr Tyr His Ser Asn Leu Lys Pro Tyr His Ile Leu Ser Tyr Val
 530 535 540
 Ile Arg Met Phe Asn Gln Leu Arg Gly Thr Ile Val Tyr Lys Asp Asp
 545 550 555 560
 Ala Ile Ile Met Thr Lys Tyr Lys Tyr Glu Tyr Gln Ala Ile Ala Ile
 565 570 575
 Phe Leu Lys Asn Arg Ile Lys Glu Asn Val Asn His Gln Gln Leu Ile
 580 585 590
 Phe Ser Asp Ile Gln Ser Leu Asn His Ala Glu Tyr Glu Tyr Ile Glu
 595 600 605
 Met Met Pro Leu Leu Met Asn Glu Asn Asn Glu Leu Asp Ser His Ile
 610 615 620
 Pro Tyr Pro His Gln Tyr Trp Leu Ala Lys Leu Lys Ser Lys Glu Ser
 625 630 635 640
 Gln Gln Ala Ile Val Asp Leu Pro Lys Met Ser Ile Ala His Leu Thr
 645 650 655
 Phe Leu Cys Ser
 660

<210> 6546
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6546
 Phe Trp Ile Phe Thr Arg Met Ser Val Arg Gly Met Asn Lys Ala Lys
 1 5 10 15
 Arg Gln Leu Arg Phe Val Leu Met Thr Leu Asn Ile Ile Lys Val Thr
 20 25 30
 Thr Gln Arg Ala Glu Asn Asn Gln Lys Ile Ile Lys Lys Thr Ile Ser
 35 40 45
 Ile Leu Phe Gln
 50

<210> 6547
 <211> 68
 <212> PRT
 <213> S.epidermidis

<400> 6547
 Ser Leu Tyr Ile Arg His Leu Val Lys Leu Val Tyr Trp Tyr Leu Leu
 1 5 10 15

Asn Tyr Thr Lys Gly Pro Tyr Phe Leu Lys Tyr Phe Asn Ile Lys Leu
 20 25 30
 His Ile Ser Thr Lys Tyr Phe Gly Glu Thr Leu Glu Gly Thr Gly Gln
 35 40 45
 Ala Glu Asp Tyr Arg Leu Lys Leu Ser Asp Lys Lys Ala Ser Gln Gln
 50 55 60
 Tyr Glu Val Leu
 65

<210> 6548

<211> 42

<212> PRT

<213> S.epidermidis

<400> 6548

Ser Leu Tyr Ile Arg His Leu Val Asn Leu Val Tyr Trp Tyr Leu Leu
 1 5 10 15
 Asn Tyr Thr Asn Gly Leu Ile Phe Leu Val Phe Gln Cys Lys Ile Ala
 20 25 30
 Tyr Lys Asn Lys Val Phe Trp Arg Asp Ser
 35 40

<210> 6549

<211> 267

<212> PRT

<213> S.epidermidis

<400> 6549

Gly Gly Asn Ile Val Phe Glu Glu Leu Glu Asn Lys Val Val Leu Ile
 1 5 10 15
 Thr Gly Ala Ala Thr Gly Ile Gly Lys Ser Ile Ala Glu Asn Phe Gly
 20 25 30
 Lys Ala Lys Ala Lys Val Val Ile Asn Tyr Arg Ser Asp Arg His His
 35 40 45
 Ser Glu Ile Glu Glu Ile Lys Gln Thr Val Ala Lys Phe Gly Gly Gln
 50 55 60
 Thr Leu Ala Val Gln Gly Asp Val Ser Ile Glu Glu Asp Ile Lys Arg
 65 70 75 80
 Met Ile Glu Thr Thr Ile Asn His Phe Gly Thr Leu Asp Ile Ile Ile
 85 90 95
 Asn Asn Ala Gly Phe Glu Asn Ser Ile Pro Thr His Glu Met Ser Ile
 100 105 110
 Asp Asp Trp Gln Lys Val Ile Asp Ile Asn Leu Thr Gly Ala Phe Val
 115 120 125
 Gly Ser Arg Glu Thr Ile Asn Gln Phe Leu Lys Glu Asn Lys Lys Gly
 130 135 140
 Thr Ile Ile Asn Ile Ser Ser Val His Asp Thr Ile Pro Trp Pro Asn
 145 150 155 160
 Tyr Val His Tyr Ala Ala Ser Lys Gly Gly Leu Lys Leu Met Met Glu
 165 170 175
 Thr Met Ser Met Glu Tyr Ala Gln Tyr Gly Ile Arg Ile Asn Asn Ile
 180 185 190
 Ser Pro Gly Ala Ile Val Thr Glu His Thr Lys Glu Lys Phe Ser Asp
 195 200 205
 Pro Thr Thr Arg Glu Glu Thr Ile Lys Met Ile Pro Ala Arg Glu Ile
 210 215 220

Gly Asn Ala Gln Asp Val Ala Asn Ala Val Leu Phe Leu Ser Ser Asp
 225 230 235 240
 Leu Ala Ser Tyr Ile His Gly Thr Thr Leu Tyr Val Asp Gly Gly Met
 245 250 255
 Met Asn Tyr Pro Ala Phe Met Gly Gly Lys Gly
 260 265

<210> 6550
 <211> 290
 <212> PRT
 <213> S.epidermidis

<400> 6550
 Leu Pro Asn Ile Leu Tyr Lys Ile Asp Asn Gln Tyr Pro Tyr Phe Thr
 1 5 10 15
 Lys Asn Glu Lys Lys Ile Ala Gln Phe Ile Leu Asn Tyr Pro His Lys
 20 25 30
 Val Val Asn Met Thr Ser Gln Glu Ile Ala Asn Gln Leu Glu Thr Ser
 35 40 45
 Ser Thr Ser Ile Ile Arg Leu Ser Lys Lys Val Thr Pro Gly Gly Phe
 50 55 60
 Asn Glu Leu Lys Thr Arg Leu Ser Lys Phe Leu Pro Lys Glu Val Thr
 65 70 75 80
 Gln Tyr Asn Val Glu Leu Val Asp Asn Glu Ser Thr Ile Ser Leu Lys
 85 90 95
 Asn Lys Leu His Ser Arg Ser Lys Ala Ala Leu Ser Asn Ala Asn Glu
 100 105 110
 Thr Ile Asn Ala Ala Ile Ile Asp Glu Ile Cys Asp Leu Ile Lys Asn
 115 120 125
 Ser Glu Thr Ile Phe Ile Tyr Gly Tyr Gly Ala Ser Phe Val Val Ala
 130 135 140
 Thr Asp Leu Tyr Gln Lys Leu Ser Arg Ile Gly Leu Asn Ile Gln Leu
 145 150 155 160
 Val His Glu Thr His Ile Phe Thr Thr Met Leu Ala Thr Arg Asn Ser
 165 170 175
 Asn Asp Cys Val Ile Phe Ile Ser Asn Asn Gly Thr Gln Ser Glu Met
 180 185 190
 Gln Ser Ile Ala Lys Val Ile Ala Asp Tyr His Ile Pro Ile Ala Thr
 195 200 205
 Ile Ser Ser Thr Ser Asp Asn Pro Val Ala Lys Gln Ser Asn Ile Val
 210 215 220
 Leu Thr Tyr Gly Gln Thr Asp Glu Asn Glu Met Arg Met Gly Ala Thr
 225 230 235 240
 Thr Ser Leu Phe Ala Gln Met Phe Thr Ile Asp Ile Leu Tyr Tyr Arg
 245 250 255
 Tyr Ile Ala Leu Asn Tyr Gln Ser Ser Leu Asp Phe Ile Thr Gln Ser
 260 265 270
 Lys Ile Ala Leu Asp Asn Tyr Arg Lys His Leu Ser Asn Ile Asp Phe
 275 280 285
 Lys His
 290

<210> 6551
 <211> 232
 <212> PRT
 <213> S.epidermidis

<400> 6551

Asp Ile Arg Met Ile Asp His Gln His Leu Arg Leu Phe Gln Phe Cys
 1 5 10 15
 Asp Ser Gln Phe Pro Thr Gly Ala Phe Ser His Ser Phe Gly Leu Glu
 20 25 30
 Thr Tyr Ile Gln Arg Glu Thr Val His Asp Thr Glu Thr Phe Ile Lys
 35 40 45
 Trp Leu His Leu Phe Ile Asn Glu Gln Leu Thr Tyr Ser Asp Gly Leu
 50 55 60
 Ala Met Arg Ile Val Tyr His Ala Leu Ile Asn Asn Asp Lys Asp Lys
 65 70 75 80
 Ile Leu Asp Ile Asn Gln Lys Leu Phe Val Gln Asn Leu Pro Lys Glu
 85 90 95
 Thr Arg Ile Gly Ala Lys Gln Met Gly Thr Arg Met Val Lys Leu Ala
 100 105 110
 Leu Asp Leu Tyr Asp Ser Glu Trp Ile Gln Trp Tyr Tyr Asn Gln Met
 115 120 125
 Lys Asn His Lys Ile Lys Leu His Pro Ala Val Cys Phe Thr Met Leu
 130 135 140
 Gly His Phe Leu Gly Val Asp Val Glu Ser Ile Ile Asp Tyr Tyr Leu
 145 150 155 160
 Tyr Gln Asn Ile Ser Ser Leu Thr Gln Asn Ala Val Arg Ala Ile Pro
 165 170 175
 Leu Gly Gln Thr Ala Gly Gln Gln Val Val Thr Glu Met Ile Ala His
 180 185 190
 Ile Glu Lys Thr Arg Asn His Ile Leu Glu Leu Asp Glu Ile Asp Phe
 195 200 205
 Gly Met Thr Ala Pro Gly Leu Glu Leu Asn Gln Met Glu His Glu Asn
 210 215 220
 Val His Val Arg Ile Phe Ile Ser
 225 230

<210> 6552

<211> 195

<212> PRT

<213> S.epidermidis

<400> 6552

Asn Ile Ser Ile His Ile Ile Phe Ile His Ile Leu Leu Thr Ile Gly
 1 5 10 15
 Gly Pro His Met Leu Ile Asp Lys Phe Glu Thr Tyr Ile Ile Asn Val
 20 25 30
 Ala Gly Leu Lys Ser Arg Ser Thr Arg Lys Lys Leu Ile His Leu Cys
 35 40 45
 Lys Glu Ile Thr Phe Cys Glu Ser Phe Gln Tyr Ser Ile Ile Lys Gln
 50 55 60
 Asn Asn Val Phe Ala Leu Glu Val Ser Leu Pro Lys Leu Gln Leu Pro
 65 70 75 80
 Tyr Leu Ile Ser Phe Leu Ser Phe His Asn Tyr Ala Ile Tyr Gln Ile
 85 90 95
 Leu Leu Pro Asn Arg Val Asn Glu Leu Leu Asp Ser Glu Gln Leu Tyr
 100 105 110
 Gln Ser Ile Lys Arg Phe Asp Leu Ala Ile Asp Gly Leu Gln Asp Ala
 115 120 125
 Phe Ile Lys Asp Lys Val Ile Asp Ile Met Asn Met Phe Ala Asn His

130		135		140
His Asn Val Asn Tyr Thr	Leu Asn Asn Asn Cys	Ala Ser Val Thr Cys		
145		150		160
Pro Pro Glu Ile Phe Thr	Lys Leu Leu Gln Thr	Ile Ala Thr Arg Asn		
	165		170	175
Ile Asp Ile Leu Ser Ala	Ser Tyr Arg Ala Lys	Met Leu His Lys Ala		
	180		185	190
Arg Ile Ser				
195				

<210> 6553
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 6553
Cys Asn Ile Ile Leu Lys Asn Leu Ala Lys Met Phe Lys Thr Lys Ile
1 5 10 15
Arg Glu Tyr Leu Thr Gln Pro Ser Leu Ile Cys Lys Lys Pro Arg Thr
20 25 30
Phe Arg Ser Arg Phe Leu Thr Gln Ala Leu His Tyr Met
35 40 45

<210> 6554
 <211> 61
 <212> PRT
 <213> S.epidermidis

<400> 6554
Val Ser Ile Ile Ile Leu Pro Lys Ser Phe Phe Tyr Ile Leu Asn Phe
1 5 10 15
Leu Val Ile Leu Phe Phe Lys Val Asn Lys Ile Ser Tyr Ile Thr Gly
20 25 30
Thr Thr Lys Ser Val Ser Ser Val Glu Glu Ile Asn Pro Pro Ile Thr
35 40 45
Val Ala Ala Ile Pro Phe Glu Ile Asn Ile Glu Leu Ser
50 55 60

<210> 6555
 <211> 58
 <212> PRT
 <213> S.epidermidis

<400> 6555
Leu Lys Ile Met Asn Ile Tyr Leu Ile Phe Leu Leu Leu Met Leu Thr
1 5 10 15
Leu Asn Phe His Ser Ile Val Lys Glu Ile Phe Lys Asn Ser Lys Gly
20 25 30
Val Tyr Ala Tyr Glu Tyr Ser Phe Lys Pro Lys Lys Pro Glu Thr Ser
35 40 45
Phe Ile Val Pro Ser Phe Leu Ser Tyr Ser
50 55

<210> 6556
 <211> 206
 <212> PRT

<213> S.epidermidis

<400> 6556

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Met Leu Thr Ile Lys Val Asn Gly Val Leu Tyr Gln Thr Lys Ile Asn
1      5      10      15
Ile Asn Ile Glu Asp Gln His Pro Lys Ile Tyr Ala Ile Gln Gly Pro
      20      25      30
Ser Gly Ile Gly Lys Thr Thr Ile Leu Asn Ile Ile Ala Gly Leu Lys
      35      40      45
Ser Ile Asn Tyr Ser Tyr Ile Lys Val Gly Lys Arg Val Leu Thr Asp
      50      55      60
Ser Gln His His Leu Asn Val Lys Val Gln Gln Arg Arg Ile Gly Tyr
      65      70      75      80
Leu Phe Gln Asp Tyr Gln Leu Phe Pro Asn Met Asn Val Tyr Asn Asn
      85      90      95
Ile Thr Phe Met Thr Lys Pro Ser Glu His Ile Asn Glu Leu Ile His
      100     105     110
Thr Leu Lys Ile Glu His Leu Leu Glu Lys Tyr Pro Val Thr Leu Ser
      115     120     125
Gly Gly Glu Ala Gln Arg Val Ala Leu Ala Arg Ala Leu Ser Thr Lys
      130     135     140
Pro Asp Leu Ile Leu Leu Asp Glu Pro Phe Ser Ser Leu Asp Asp Lys
      145     150     155     160
Thr Lys Lys Glu Gly Ile Lys Leu Ile Leu Lys Ile Phe Glu Ala Trp
      165     170     175
Gln Ile Pro Ile Ile Phe Val Thr His Ser Asn Tyr Glu Ala Gln Gln
      180     185     190
Met Ala His Glu Ile Ile Thr Ile Glu Asp Cys Ile Gln Ile
      195     200     205

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<210> 6557

<211> 229

<212> PRT

<213> S.epidermidis

<220>

<221> UNSURE

<222> (167), (168), (169), (170), (171), (172), (173)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 6557

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Val Ala Thr Ile Ser Ser Ala Arg Ile Cys Pro Lys Leu Ser Ser Lys
1      5      10      15
Leu Thr Leu Ile Phe Phe Thr Ser Thr Cys Cys Phe Ile Ile Arg Leu
      20      25      30
Ile Ala Ser Leu Thr Asp Ile Gly Val Leu Phe Ser Ile Asp Ile His
      35      40      45
Ser Ser Pro Lys Asn Ile Asn Phe His Asp Ile Leu Thr Pro Asn Arg
      50      55      60
Arg Glu Lys Met Thr His Phe Thr His Ile Asn Lys Gln Gly Asn Ala
      65      70      75      80
Lys Met Val Asp Val Ser Asn Lys Glu Ile Thr Lys Arg Val Ala Glu
      85      90      95
Ala His Ser Ser Ile Ile Val Asn Glu Lys Ile Tyr Arg Gln Ile Thr
      100     105     110
Gln Asn Thr Asn Ser Lys Gly Asn Val Leu Asn Thr Ala Gln Ile Ala

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115 120 125
 Gly Ile Met Ala Ala Lys Asn Thr Ser Thr Ile Ile Pro Met Cys His
 130 135 140
 Pro Leu Pro Leu Thr Gly Ile Asp Ile Ser Phe Lys Trp Asp Ser Asn
 145 150 155 160
 Asn Asp Asp Ser Tyr Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Thr Thr
 165 170 175
 Gly Lys Thr Gly Val Glu Met Glu Ala Leu Thr Ala Ala Ser Val Thr
 180 185 190
 Ala Leu Thr Ile Tyr Asp Met Thr Lys Ala Ile Asp Lys Gly Met Ile
 195 200 205
 Ile Gly Glu Thr Tyr Leu Glu Ser Lys Ser Gly Gly Lys Ser Gly Asp
 210 215 220
 Phe His Arg Lys Asn
 225

<210> 6558
 <211> 132
 <212> PRT
 <213> S.epidermidis

<400> 6558
 Leu Asp Lys Ile Ile Lys Val Leu Tyr Leu Tyr Thr Ser Leu Asn Ser
 1 5 10 15
 Phe Asn Ile Lys Phe Ala Arg Gln Ile Asn Met Lys Glu Gly Ile Val
 20 25 30
 Leu His Phe Thr Gln Arg Glu Gln Asp Lys Leu Met Ile Val Val Ala
 35 40 45
 Ala Glu Val Ala Arg Arg Arg Lys Ala Arg Gly Leu Lys Leu Asn His
 50 55 60
 Pro Glu Ala Leu Ala Leu Ile Ser Asp Glu Leu Leu Glu Gly Ala Arg
 65 70 75 80
 Asp Gly Lys Thr Val Ala Glu Leu Met Ser Tyr Gly Lys Thr Ile Leu
 85 90 95
 Asn Glu Glu Asp Val Met Asp Gly Val Ala Asn Met Ile Thr Glu Leu
 100 105 110
 Glu Ile Glu Ala Thr Phe Pro Asp Gly Thr Lys Leu Ile Thr Val His
 115 120 125
 His Pro Ile Val
 130

<210> 6559
 <211> 375
 <212> PRT
 <213> S.epidermidis

<400> 6559
 Asn Met Lys Ile Ala Ile Val Gly Ala Gly Ile Gly Gly Leu Thr Ala
 1 5 10 15
 Ala Ala Leu Leu Glu Glu Gln Gly His Gln Val Lys Val Phe Glu Lys
 20 25 30
 Asn Thr Ser Ile Asn Glu Leu Ser Ala Gly Ile Gly Ile Gly Asp Asn
 35 40 45
 Val Leu Lys Lys Leu Gly His His Asp Leu Ala Lys Gly Ile Lys Asn
 50 55 60
 Ala Gly Gln Asn Leu Thr Ala Met Asn Ile Tyr Asp Glu Gln Gly Thr

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65          70          75          80
Pro Leu Met Ser Ala Lys Leu Lys Ser His Ser Leu Asn Val Ala Leu
      85          90          95
Ser Arg Gln Thr Leu Ile Glu Ile Ile Gln Ser Tyr Val Glu Glu Ser
      100         105         110
Ser Ile His Thr Gly Phe Lys Val Thr Lys Ile Glu Gln Thr Ser Cys
      115         120         125
Lys Val Thr Leu His Phe Thr Lys Gln Glu Ser Glu Ser Phe Asp Leu
      130         135         140
Cys Ile Gly Ala Asp Gly Leu His Ser Val Val Arg Glu Ser Val Gly
      145         150         155         160
Ala Arg Thr Lys Ile Arg Tyr Asn Gly Tyr Thr Cys Phe Arg Gly Met
      165         170         175
Val Glu Asp Val Gln Phe Asn Asp Gln His Val Ala Asn Glu Tyr Trp
      180         185         190
Gly Val Lys Gly Arg Val Gly Ile Val Pro Leu Ile Asn Gln Arg Ala
      195         200         205
Tyr Trp Phe Ile Thr Val His Ala Lys Glu Gly Asp Pro Lys Tyr Gln
      210         215         220
Ser Phe Gly Lys Pro His Leu Gln Ala Tyr Phe Asn His Phe Pro Asn
      225         230         235         240
Glu Val Arg Asn Val Leu Glu Arg Gln Ser Glu Thr Gly Ile Leu Leu
      245         250         255
His Asp Ile Tyr Asp Leu Lys Pro Leu Lys Thr Phe Val Tyr Gly Arg
      260         265         270
Thr Ile Leu Met Gly Asp Ala Ala His Ala Thr Thr Pro Asn Met Gly
      275         280         285
Gln Gly Ala Ser Gln Ala Met Glu Asp Ala Ile Val Leu Val Asn Cys
      290         295         300
Leu Glu Lys Tyr Asp Phe Asn Lys Ala Ile Glu Arg Tyr Asp Lys Leu
      305         310         315         320
Arg Val Lys His Thr Thr Lys Val Ile Arg Arg Ser Lys Lys Ile Gly
      325         330         335
Lys Met Ala Gln Lys His His Lys Leu Thr Val Lys Leu Arg Asn Thr
      340         345         350
Ala Met Lys Leu Ile Pro Asn Ala Leu Ala Ser Ala Gln Thr Lys Phe
      355         360         365
Leu Tyr Lys Ser Lys Glu Lys
      370         375

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<210> 6560

<211> 307

<212> PRT

<213> S.epidermidis

<400> 6560

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Lys Glu Gly Ile Asn Val Thr Glu Gln Phe Val Ile Ile Ile Leu Leu
1          5          10          15
Ile Ala Leu Gly Tyr Phe Leu Lys Arg Met Asn Tyr Leu Lys Ala Thr
      20         25         30
Asp Ser Gln Val Leu Ser Thr Leu Val Leu Asn Val Thr Leu Pro Ser
      35         40         45
Leu Val Ile Val Asn Leu Asn Ser Ala Lys Leu Asp Val Ser Phe Ser
      50         55         60
Ile Leu Pro Ile Met Met Ile Ile Tyr Gly Ile Val Ala Lys Ile Ile
65          70          75          80

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Val Ile Trp Phe Phe Arg Lys Tyr Asp Asn His Met Arg Gly Ser Val
 85 90 95
 Gly Met Met Thr Gly Ser Met Asn Ile Gly Leu Phe Ala Tyr Pro Leu
 100 105 110
 Val Glu Ala Ile Trp Pro Ser Lys Gly Met Ile Tyr Phe Gly Met Val
 115 120 125
 Asp Ile Gly Gly Ala Ile Ile Met Phe Gly Ile Thr Tyr Phe Val Gly
 130 135 140
 Ser Tyr Phe Ser Glu Gly Ser Asp Gln Phe Asn Phe Lys Phe Leu Gly
 145 150 155 160
 Lys Lys Leu Val Gln Ser Val Pro Leu Val Thr Tyr Met Ile Met Phe
 165 170 175
 Gly Leu Asn Met Ser His Ile His Ile Trp Gln Pro Ala Ile Asp Phe
 180 185 190
 Phe Ser Val Leu Ser Lys Ala Asn Met Pro Leu Ser Met Ile Leu Leu
 195 200 205
 Gly Val Met Leu Asn Phe Ser Ile Glu Arg Glu Tyr Leu Pro Val Thr
 210 215 220
 Ile Lys Tyr Leu Cys Leu His Tyr Gly Leu Gly Met Leu Ala Gly Thr
 225 230 235 240
 Leu Val His Phe Leu Leu Pro Val Ser Asp Asp Met Ile Lys Thr Thr
 245 250 255
 Leu Leu Ile Thr Trp Leu Leu Pro Val Gly Val Ala Ile Ile Pro Tyr
 260 265 270
 Ser Ile Gln Phe Lys Tyr Lys Thr Leu Pro Phe Val Gly Met Val Thr
 275 280 285
 Asn Leu Thr Ile Ile Ile Ser Ile Ile Ile Leu Tyr Ile Tyr Gln Ala
 290 295 300
 Val Phe Val
 305

<210> 6561

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6561

Lys Asn Leu Ile Ile Tyr Val Ile Lys Asp Asn Gln Asp Tyr Glu Leu
 1 5 10 15
 Asn Leu Tyr Cys Leu Cys Ala Ser Asn Gln Asp Leu Met Asp Gln Lys
 20 25 30
 Val Asn Lys Phe Lys Cys Phe Ile Thr Met Ile Leu
 35 40

<210> 6562

<211> 282

<212> PRT

<213> S.epidermidis

<400> 6562

Pro Leu Leu Ile Glu Ile Thr Leu Asn Leu Ala Ile Tyr Asn Asp Lys
 1 5 10 15
 Arg Ser Phe Ile Glu Arg Asp Ala Glu Asp Val Leu Pro Lys Val Ile
 20 25 30
 Ala Ala Gln Lys Val Leu Lys Glu Ile Arg Lys Asp Val Glu Ile Asp
 35 40 45

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Ala Tyr Ile Glu His Val Asn Tyr Asn Phe Leu Glu Gln His Gly Met
 50          55          60
His Val Asp Ile Ile Leu Asp Ala Thr Asp Asn Phe Asp Thr Arg Gln
65          70          75          80
Leu Ile Asn Asp Phe Ala Tyr Lys His Gln Ile Pro Trp Ile Tyr Gly
          85          90          95
Gly Val Val Gln Ser Thr Tyr Val Gln Ala Thr Phe Ile Pro Gly Glu
          100          105          110
Thr Pro Cys Phe Asn Cys Leu Met Pro Gln Leu Pro Ser Ile Asn Leu
          115          120          125
Thr Cys Asp Thr Val Gly Val Ile Gln Pro Ala Val Thr Met Thr Thr
          130          135          140
Ser Leu Gln Leu Val Asp Ala Leu Lys Leu Leu Thr Gly Asn Lys Val
145          150          155          160
Asn Lys His Phe Thr Tyr Gly Asp Ile Trp Thr Gly Asp His Tyr Thr
          165          170          175
Phe Gly Phe Ser Arg Met Gln Asn Glu Asp Cys Lys Thr Cys Gly Asn
          180          185          190
Ala Pro Thr Tyr Pro His Leu Asn Gln His Gln Gln Asp Tyr Ala Thr
          195          200          205
Leu Cys Gly Arg Asp Thr Val Gln Tyr Lys Asn Ala Asp Ile Ser Gln
210          215          220
Glu Ile Leu Leu Ser Phe Leu Glu Arg Asn His Ile Gln Tyr Arg Thr
225          230          235          240
Asn Leu Tyr Met Thr Met Phe Arg Phe Arg Glu His Arg Ile Val Ala
          245          250          255
Phe Ser Gly Gly Arg Phe Leu Ile His Gly Thr Thr Glu Pro Lys Lys
          260          265          270
Ala Ile Gln Leu Met His Gln Leu Phe Gly
          275          280

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<210> 6563
<211> 362
<212> PRT
<213> S.epidermidis

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<400> 6563
Leu Ala Met Ile Arg Tyr Gln Glu Gly Val Phe Lys Met Leu Gly Phe
1          5          10          15
Ser Val Tyr Leu Gly Gln Asn Leu Asp Arg Asp Tyr Ile Leu Asn Met
          20          25          30
Ala Asp Leu Gly Tyr Asp Val Val Phe Thr Ser Leu Gln Ile Pro Glu
          35          40          45
Glu Asp Lys Lys Asn Gln Met Ala Tyr Leu Gly Asp Leu Cys Gln Leu
50          55          60
Leu Ser Ala Tyr Gln Ile Thr Tyr Ile Ile Asp Val Thr Pro Ser Leu
65          70          75          80
Leu Asn Gln Thr Ile Tyr Ser Tyr Leu Asn Gln Leu Pro His Gly Asp
          85          90          95
Phe Tyr Ile Arg Ile Asp Asn Gln Leu Asn Ile Asp Leu Ile Lys Asp
          100          105          110
Ile Ile Ser His Gly Phe Lys Cys Cys Leu Asn Ala Ser Thr Leu Thr
          115          120          125
Asp Ser Met Leu Ala His Ile Tyr Cys Thr Asp Phe Asn Asn Gln Leu
130          135          140
Leu Tyr Cys His Asn Tyr Tyr Pro Arg Pro Asp Thr Gly Leu Ser Ile

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145 150 155 160
 Ser Phe Ile Glu Glu Lys Asn Gln Leu Ile Arg Lys Tyr Asp Ala His
 165 170 175
 Ala Lys Ile Cys Ala Phe Ile Pro Gly Thr Gln Lys Arg Gly Pro Leu
 180 185 190
 Phe Lys Gly Leu Pro Thr Val Glu Lys His Arg Phe Glu His Pro Leu
 195 200 205
 Ile Ala Ala Gln Asp Leu Gln Leu Thr Gly Ile Ser Asp Ile Ile Ile
 210 215 220
 Ser Asp Thr Leu Leu Ser His Ile Tyr Ala Glu Gln Leu Ser Asn Met
 225 230 235 240
 Trp Leu Tyr Arg His Phe Ile Leu His Leu Asp Gln Leu Asp Ser Ser
 245 250 255
 Phe Thr Ser Gln Val Leu Lys Ile His Thr Ser Arg Leu Asp Ser Pro
 260 265 270
 Glu His Val Ile Arg Ser Gln Tyr Ser Arg Thr Asp Asn Gln Gln Thr
 275 280 285
 Val Pro Met Ile Gly Ser Ala His Arg Asp Gln Gly Asp Ile Thr Ile
 290 295 300
 Asp Asn His Leu Asn Gly Arg Tyr Glu Gly Glu Ile Gln Val Ile Lys
 305 310 315 320
 Ala Pro Met Pro Gly His Ser His Ile Asn Cys Ile Gly His Val Cys
 325 330 335
 Asp Lys Asp Val Pro Leu Leu Ser Leu Ile Gln Pro Gly Asp Thr Phe
 340 345 350
 Lys Phe Val Tyr Thr Lys Glu Asn Asn Lys
 355 360

<210> 6564

<211> 256

<212> PRT

<213> S.epidermidis

<400> 6564

Gly Val Lys Met Ile Leu Asp Glu Arg Val Asn Ser Asn Phe Asp Gln
 1 5 10 15
 Leu Asn Asp Asn Asp Ile Gln Ile Ala His Tyr Val Asn Thr His Ile
 20 25 30
 Asp Val Cys Lys Asn Met Lys Ile Gln Asp Leu Ala Ser Gln Thr His
 35 40 45
 Ala Ser Asn Ala Thr Ile His Arg Phe Thr Arg Lys Leu Gly Phe Asp
 50 55 60
 Gly Tyr Ser Asp Phe Lys Ser Phe Leu Lys Phe Glu Asp Ser Lys Asn
 65 70 75 80
 His Gln Leu Pro Ser Asp Ser Met Glu Gln Phe Lys Gln Glu Ile Glu
 85 90 95
 Asn Thr Phe Asn Tyr Leu Glu Arg Ile Asp Tyr Arg Leu Leu Thr His
 100 105 110
 Lys Met His His Ala Thr Thr Ile Tyr Leu Tyr Gly Thr Gly Arg Ala
 115 120 125
 Gln Met Asn Val Ala Glu Glu Ala Gln Arg Ile Leu Leu Thr Met His
 130 135 140
 Lys Asn Ile Ile Leu Leu His Asp Val His Glu Leu Lys Met Val Leu
 145 150 155 160
 Asn Lys Thr Ile Pro Glu Asp Leu Phe Phe Ile Ile Ser Leu Ser Gly
 165 170 175

Glu	Thr	His	Gln	Leu	Lys	Glu	Val	Thr	Gln	Leu	Leu	Gln	Leu	Arg	Gln
			180					185					190		
Lys	Tyr	Phe	Ile	Ser	Val	Thr	Thr	Met	Lys	Asp	Asn	Thr	Leu	Ala	Gln
		195					200					205			
Gln	Ala	Asp	Tyr	Asn	Val	Tyr	Val	Ser	Ser	Asn	Thr	Phe	Tyr	Leu	Asn
	210					215					220				
Asp	Gly	Thr	Asp	Tyr	Ser	Ser	Phe	Ile	Ser	Tyr	His	Ile	Phe	Phe	Glu
225					230					235					240
Thr	Leu	Leu	Arg	Lys	Tyr	Asn	Glu	Tyr	Lys	Glu	Asn	His	Glu	Leu	Thr
				245					250						255

<210> 6565

<211> 287

<212> PRT

<213> S.epidermidis

<400> 6565

Val	Gln	Ile	Val	Asp	Phe	Leu	Ile	Ala	Leu	Leu	Pro	Ala	Leu	Phe	Trp
1				5					10					15	
Gly	Ser	Val	Val	Ile	Ile	Asn	Val	Phe	Val	Gly	Gly	Gly	Pro	Tyr	Asn
			20					25					30		
Gln	Ile	Arg	Gly	Thr	Thr	Leu	Gly	Thr	Leu	Phe	Ile	Gly	Phe	Ser	Leu
		35					40					45			
Leu	Ala	Thr	Gly	His	Ala	Ala	Phe	Asp	Asn	Leu	Thr	Val	Ile	Ile	Val
	50					55					60				
Gly	Leu	Val	Ser	Gly	Ala	Leu	Trp	Ala	Phe	Gly	Gln	Gly	Asn	Gln	Leu
65					70					75					80
Lys	Ser	Val	His	Leu	Ile	Gly	Val	Ser	Lys	Thr	Met	Pro	Ile	Ser	Thr
			85						90					95	
Gly	Met	Gln	Leu	Val	Gly	Thr	Thr	Leu	Phe	Ser	Ala	Ile	Phe	Leu	Gly
			100					105					110		
Glu	Trp	Ser	Thr	Ile	Val	Gln	Val	Val	Met	Gly	Leu	Ile	Ala	Met	Ile
		115				120						125			
Leu	Leu	Val	Val	Gly	Ile	Ser	Leu	Thr	Ser	Leu	Lys	Ala	Lys	Ser	Glu
	130					135					140				
Gly	Lys	Ser	Asp	Asn	Pro	Glu	Phe	Lys	Lys	Ala	Met	Gly	Ile	Leu	Leu
145					150					155					160
Leu	Ser	Thr	Ile	Gly	Tyr	Val	Gly	Tyr	Val	Val	Leu	Gly	Asp	Ile	Phe
				165				170						175	
Gly	Val	Ser	Gly	Thr	Asp	Ala	Leu	Phe	Phe	Gln	Ser	Ile	Gly	Met	Ala
			180					185					190		
Ile	Gly	Gly	Leu	Ile	Leu	Ser	Met	Asn	His	Asn	Thr	Ser	Ile	Lys	Ser
	195						200					205			
Thr	Ala	Leu	Asn	Leu	Ile	Pro	Gly	Val	Ile	Trp	Gly	Ile	Gly	Asn	Leu
	210					215					220				
Phe	Met	Phe	Tyr	Ser	Gln	Pro	Lys	Val	Gly	Val	Ala	Thr	Ser	Phe	Ser
225					230					235					240
Leu	Ser	Gln	Leu	Leu	Val	Ile	Val	Ser	Thr	Leu	Gly	Gly	Ile	Phe	Ile
				245					250					255	
Leu	Gly	Glu	Lys	Lys	Asp	Arg	Arg	Gln	Met	Ile	Gly	Ile	Trp	Ser	Gly
		260						265					270		
Ile	Ile	Val	Ile	Val	Ile	Ala	Ser	Ile	Ile	Leu	Gly	Asn	Leu	Lys	
		275					280					285			

<210> 6566

<211> 42

<212> PRT

<213> S.epidermidis

<400> 6566

Tyr	Phe	Asn	Val	Lys	Leu	His	Ile	Lys	Thr	Lys	Tyr	Phe	Gly	Glu	Ile
1				5					10					15	
Leu	Glu	Gly	Thr	Gly	Gln	Ala	Glu	Asp	Tyr	Arg	Leu	Lys	Leu	Ser	Pro
			20					25					30		
Lys	Lys	Ala	Ser	Gln	Gln	Tyr	Glu	Val	Leu						
		35					40								

<210> 6567

<211> 56

<212> PRT

<213> S.epidermidis

<400> 6567

Ser	Lys	Thr	Val	Ala	Thr	Ile	Asn	Leu	Lys	Ile	Ile	Thr	Met	Tyr	Gln
1				5					10					15	
Leu	Arg	Leu	Thr	Gln	Phe	Ser	Asn	Phe	Asn	Ile	Phe	Thr	Leu	Phe	Met
			20					25					30		
His	Tyr	Leu	Tyr	Ser	Leu	Ile	Phe	Asn	Ser	Cys	Lys	Gln	His	Asn	Pro
		35					40					45			
Cys	Ser	Lys	Asn	Lys	Trp	Pro	Cys								
		50				55									

<210> 6568

<211> 113

<212> PRT

<213> S.epidermidis

<400> 6568

Leu	Lys	Gly	Val	Glu	Arg	Met	Ile	Leu	Asp	Asn	Val	Asn	Pro	Asp	Asp
1				5					10					15	
Leu	Phe	Pro	Thr	Glu	Lys	Lys	Gly	Pro	Ser	Val	Leu	Gly	Met	Ile	Glu
			20					25					30		
Tyr	Asn	Val	Gln	Gly	Gln	Thr	Lys	Phe	Glu	Gly	Ala	Phe	Ile	Ala	Thr
		35					40					45			
Asn	Glu	Arg	Leu	Ile	Met	Asn	Val	Asp	Met	Asn	Gly	Gln	Phe	Tyr	Tyr
	50					55					60				
Arg	Asn	Ile	Arg	Tyr	Asp	Glu	Ile	Asn	Gln	Ile	His	Phe	Asp	Gly	Ser
65					70				75					80	
Asp	Ile	Ile	Phe	Glu	Phe	Asn	Ile	Gly	Thr	Val	Pro	Met	Arg	Glu	Ile
			85					90						95	
Lys	Thr	Glu	Asp	Val	Gln	Ala	Phe	Val	Asp	Tyr	Ile	Lys	Gln	Gln	Ile
		100						105					110		

Gln

<210> 6569

<211> 112

<212> PRT

<213> S.epidermidis

<400> 6569

Gly	Phe	Leu	Val	Ser	Pro	Ala	Glu	Met	Pro	Ile	Asn	Ser	Thr	Pro	Trp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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1           5           .10           15
Tyr Asp Gln Ile Thr Ile Asp Lys Ala Lys Lys Asn Pro Met Asn Pro
                20                25                30
Phe Gly Ile Asn Pro Pro Cys Asp His Lys Leu Glu Ile Pro Ile Gly
                35                40                45
Phe Pro Pro Leu Pro Ile Pro Asn Lys Ile Asn Arg Asn Pro Ala Ile
                50                55                60
Ile Ile Asn Thr Ile Val Thr Thr Leu Ile Lys Ala Asn Gln Asn Ser
65                70                75                80
Asn Ser Pro Asn Ala Phe Thr Glu Thr Arg Leu Ala Ala Ile Lys Lys
                85                90                95
Arg Thr Ala Ile Thr Pro Gly Ile Gln Leu Gly Arg Leu Gly Asn Gln
                100                105                110

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<210> 6570

<211> 80

<212> PRT

<213> S.epidermidis

<400> 6570

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Ile Gly Val Val Gly Met Gln Arg Ser Asp Lys Arg Lys Met Ser Leu
1           5           10           15
Pro Met Lys Ile Leu Leu Trp Val Val Gly Ile Leu Phe Leu Leu Ala
                20                25                30
Ile Ile Ala Val Ile Tyr Val Ser Ala Lys Ile Phe Ile Thr Gly Asp
                35                40                45
Lys Ile His Asn Pro Leu Asn Arg Asn His Ser Glu Leu Arg Ser Gly
50                55                60
Lys Val Asn Leu Lys Met Val Ile His Leu Leu His Phe Leu Ala
65                70                75                80

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<210> 6571

<211> 428

<212> PRT

<213> S.epidermidis

<400> 6571

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Lys Leu Ile Phe Phe Gly Asp Glu Cys Met Ser Ile Glu Lys Arg Thr
1           5           10           15
Pro Ile Ser Val Lys Glu Ala Ile Lys Arg Ile Met Lys Gln Gln Val
                20                25                30
Glu Val Lys Asn Ile Asn Val Asn Leu Asp Glu Ser Leu Gly His Ile
35                40                45
Leu Ala Glu Asp Ile Val Ala Thr Tyr Asp Ile Pro Arg Phe Asn Lys
50                55                60
Ser Pro Tyr Asp Gly Phe Ala Ile Arg Ser Glu Asp Ser Gln Gly Ala
65                70                75                80
Ser Gly Glu Asn Arg Ile Glu Phe Glu Val Ile Asp His Ile Gly Ala
                85                90                95
Gly Ser Val Ser Glu Lys Thr Ile Asp Lys Asn Gln Ala Ile Arg Ile
100                105                110
Met Thr Gly Ala Gln Ile Pro Ser Gly Ala Asp Ala Val Val Met Phe
115                120                125
Glu Gln Thr Ile Glu Ser Glu Thr Thr Phe Thr Ile Arg Lys Ser Phe
130                135                140
Lys His Leu Glu Asn Ile Ser Leu Gln Gly Glu Glu Ile Lys Ala Gly

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Ile	Ala	Thr	Asp	Ala	Gly	Arg	Glu	Gly	Glu	Leu	Val	Ala	Arg	Leu	Ile
	115						120					125			
Leu	Asp	Arg	Val	Gly	Asn	Lys	Lys	Pro	Ile	Lys	Arg	Leu	Trp	Ile	Ser
	130					135					140				
Ser	Val	Thr	Lys	Lys	Ala	Ile	Gln	Glu	Gly	Phe	Lys	Arg	Leu	Lys	Asn
145					150					155					160
Gly	Asn	Ala	Tyr	Gln	Asn	Leu	Tyr	Glu	Ala	Ala	Leu	Ala	Arg	Ser	Glu
				165					170						175
Ala	Asp	Trp	Ile	Val	Gly	Ile	Asn	Ala	Thr	Arg	Ala	Leu	Thr	Thr	Lys
	180						185						190		
Tyr	Asp	Ala	Gln	Leu	Ser	Leu	Gly	Arg	Val	Gln	Thr	Pro	Thr	Ile	Gln
	195						200					205			
Leu	Val	Lys	Ser	Arg	Gln	Asp	Glu	Ile	Asn	Tyr	Phe	Lys	Pro	Glu	Lys
	210					215					220				
Tyr	Tyr	Thr	Leu	Ser	Ile	Asn	Val	Asp	Gly	Tyr	Asp	Leu	Lys	Leu	Asn
225					230					235					240
Gln	Gln	Lys	Arg	Tyr	Lys	Asp	Lys	Lys	Glu	Leu	Glu	Leu	Ile	Glu	His
				245					250					255	
Glu	Ile	Lys	His	Gln	Glu	Gly	Lys	Ile	Leu	Glu	Val	Lys	Gly	Lys	Asn
			260					265					270		
Lys	Lys	Ser	Tyr	Ala	Gln	Pro	Leu	Phe	Asn	Leu	Thr	Asp	Leu	Gln	Gln
	275						280					285			
Glu	Ala	Tyr	Lys	Arg	Tyr	Lys	Met	Gly	Pro	Lys	Glu	Thr	Leu	Asn	Thr
	290					295					300				
Leu	Gln	His	Leu	Tyr	Glu	Arg	His	Lys	Leu	Val	Thr	Tyr	Pro	Arg	Thr
305					310					315					320
Asp	Ser	Asn	Tyr	Leu	Thr	Asp	Asp	Met	Val	Asp	Thr	Ile	Gln	Glu	Arg
			325						330					335	
Leu	Arg	Ala	Ile	Leu	Ala	Thr	Asp	Tyr	Lys	Ser	His	Val	Arg	Asp	Leu
			340					345					350		
Ile	Ser	Lys	Ser	Phe	Ser	Ser	Lys	Met	His	Ile	Phe	Asn	Asn	Gln	Lys
	355						360					365			
Val	Ser	Asp	His	His	Ala	Ile	Ile	Pro	Thr	Glu	Val	Arg	Pro	Ser	Ile
	370					375					380				
Glu	Gln	Leu	Ser	Gln	Arg	Glu	Phe	Lys	Ile	Tyr	Met	Leu	Ile	Ala	Glu
385					390					395					400
Arg	Phe	Leu	Glu	Asn	Leu	Met	Asn	Pro	Tyr	Leu	Tyr	Glu	Val	Leu	Thr
				405					410					415	
Ile	His	Ala	Gln	Leu	Lys	Asp	Tyr	His	Phe	Val	Leu	Lys	Glu	Lys	Ile
			420					425					430		
Pro	Lys	Gln	Leu	Gly	Tyr	Lys	Ala	Leu	Lys	Asp	Gln	Leu	Ser	Ser	His
	435						440					445			
Thr	Leu	Thr	His	Ser	Phe	Lys	Glu	Gly	Gln	Leu	Phe	Lys	Val	His	Arg
	450					455					460				
Ile	Glu	Ile	His	Glu	His	Glu	Thr	Lys	Ala	Pro	Glu	Tyr	Phe	Asn	Glu
465					470					475					480
Gly	Ser	Leu	Leu	Lys	Ala	Met	Glu	Asn	Pro	Gln	Asn	His	Ile	Asp	Leu
				485					490					495	
Asn	Asp	Lys	Lys	Tyr	Ala	Lys	Thr	Leu	Lys	His	Thr	Gly	Gly	Ile	Gly
		500						505				510			
Thr	Val	Ala	Thr	Arg	Ala	Asp	Ile	Ile	Glu	Lys	Leu	Phe	Asn	Met	Asn
	515						520					525			
Ala	Leu	Glu	Ser	Arg	Asp	Gly	Lys	Ile	Lys	Val	Thr	Ser	Lys	Gly	Lys
	530					535					540				
Gln	Ile	Leu	Glu	Leu	Ser	Pro	Ser	Glu	Leu	Thr	Ser	Pro	Ile	Leu	Thr
545					550					555					560

Ala Gln Trp Glu Glu Lys Leu Met Leu Ile Glu Lys Gly Lys Tyr Asn
 565 570 575
 Ser Gln Lys Phe Ile Gln Glu Met Lys Asn Phe Thr Phe Lys Val Val
 580 585 590
 Asn Lys Ile Lys Ser Ser Glu Gln Lys Tyr Lys His Asp Asn Leu Thr
 595 600 605
 Thr Thr Glu Cys Pro Thr Cys Gly Lys Phe Met Ile Lys Val Lys Thr
 610 615 620
 Lys Asn Gly Gln Met Leu Val Cys Gln Asp Pro Lys Cys Lys Thr Lys
 625 630 635 640
 Lys Asn Ile Gln Arg Lys Thr Asn Ala Arg Cys Pro Asn Cys Lys Lys
 645 650 655
 Lys Met Thr Leu Phe Gly Lys Gly Lys Glu Ala Val Tyr Arg Cys Val
 660 665 670
 Cys Gly His Thr Glu Thr Gln Ser Gln Met Asp Lys Arg Met Arg Asp
 675 680 685
 Lys Thr Asn Gly Lys Val Ser Arg Lys Glu Met Lys Lys Tyr Ile Asn
 690 695 700
 Lys Lys Glu Glu Ile Asp Asn Asn Pro Phe Lys Asp Ala Leu Lys Asn
 705 710 715 720
 Leu Lys Leu

<210> 6573
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 6573
 Gln Ile Val Phe Ile Asn Arg Val Arg Ile Glu Phe Asn Asp Met Met
 1 5 10 15
 Thr His Phe Pro Met Leu Ile His Asp Ser Leu Tyr Ile Arg Tyr Ile
 20 25 30
 Phe Leu Val Val Phe Gln Arg Lys Cys Asp Ser
 35 40

<210> 6574
 <211> 138
 <212> PRT
 <213> S.epidermidis

<400> 6574
 Ile Leu Gln Phe Leu Glu Ala Leu Asn Ile Met Lys Lys Ile Lys Thr
 1 5 10 15
 Ile Ser Thr Leu Val Ala Gly Leu Gly Ile Ala Phe Leu Gly His Thr
 20 25 30
 Thr His Ala Asp Ala Ala Glu Asn Asn Gln Gln Gln Ser Thr Tyr
 35 40 45
 Asn Tyr Ser Thr Thr Glu Val Ser Phe Ser Asn Ser Gly Asn Leu Tyr
 50 55 60
 Thr Ser Gly Gln Cys Thr Trp Tyr Val Tyr Asp Lys Thr Gly Gly Lys
 65 70 75 80
 Ile Gly Ser Thr Trp Gly Asn Ala Asn Ser Trp Ala Thr Ala Ala Gln
 85 90 95
 Ala Ala Gly Phe Thr Val Asn Asn Thr Pro Glu Glu Gly Ala Ile Met
 100 105 110

Gln Ser Ser Glu Val Leu Ser Asp Met Leu Leu Ser Leu Lys Val Leu
 115 120 125
 Ile Met Met Val Leu Leu Leu Tyr Gln Lys
 130 135

<210> 6575
 <211> 150
 <212> PRT
 <213> S.epidermidis

<400> 6575
 Met Lys Gln Phe Glu Ile Val Thr Gln Pro Ile Glu Thr Glu Gln Tyr
 1 5 10 15
 Arg Asp Phe Thr Ile Asn Glu Arg Gln Gly Ala Val Val Val Phe Thr
 20 25 30
 Gly His Val Arg Glu Trp Thr Lys Gly Ile Arg Thr Gln His Leu Glu
 35 40 45
 Tyr Glu Ala Tyr Ile Pro Met Ala Glu Lys Lys Leu Ala Gln Ile Gly
 50 55 60
 Lys Glu Ile Glu Glu Lys Trp Pro Gly Thr Ile Thr Thr Ile Val His
 65 70 75 80
 Arg Ile Gly Pro Leu Gln Ile Ser Asp Ile Ala Val Leu Ile Ala Val
 85 90 95
 Ser Ser Pro His Arg Lys Ala Ala Tyr Ala Ala Asn Glu Tyr Ala Ile
 100 105 110
 Glu Arg Ile Lys Glu Ile Val Pro Ile Trp Lys Lys Glu Ile Trp Asp
 115 120 125
 Asp Gly Ser Glu Trp Gln Gly His Gln Lys Gly Thr Tyr Asn Glu Ala
 130 135 140
 Lys Lys Gly Lys Ala Arg
 145 150

<210> 6576
 <211> 484
 <212> PRT
 <213> S.epidermidis

<400> 6576
 Gln Leu Lys Phe Lys Lys Arg Gly Phe Val Ser Asn His Thr Glu Gly
 1 5 10 15
 Ser Lys Ser Met Thr Gln Lys Tyr Arg Tyr Pro Thr Phe Leu Glu Ser
 20 25 30
 Ile Ser Thr Ile Leu Val Met Val Val Val Val Val Ile Gly Phe Val
 35 40 45
 Phe Phe Asn Ile Pro Ile Gln Ile Leu Leu Leu Ile Ser Ser Ala Tyr
 50 55 60
 Ala Ala Phe Ile Ala His Arg Val Gly Leu Lys Trp Lys Asp Leu Glu
 65 70 75 80
 Glu Gly Ile Thr His Arg Leu Ser Thr Ala Met Pro Ala Ile Phe Ile
 85 90 95
 Ile Leu Ala Val Gly Ile Ile Val Gly Ser Trp Met Tyr Ser Gly Thr
 100 105 110
 Val Pro Ala Leu Ile Tyr Tyr Gly Leu Lys Phe Leu Asn Pro Ser Tyr
 115 120 125
 Leu Leu Val Ser Ala Phe Ile Ile Ser Ala Met Thr Ser Ile Ala Thr
 130 135 140

Gly Thr Ala Trp Gly Ser Ala Ser Thr Ala Gly Ile Ala Leu Ile Ser
 145 150 155 160
 Ile Ala Asn Gln Leu Gly Val Pro Ala Gly Met Ala Ala Gly Ala Ile
 165 170 175
 Ile Ala Gly Ala Val Phe Gly Asp Lys Met Ser Pro Leu Ser Asp Thr
 180 185 190
 Thr Asn Leu Ala Ala Leu Val Thr Lys Val Asn Ile Phe Ala His Ile
 195 200 205
 Lys Ser Met Met Trp Thr Thr Ile Pro Ala Ser Ile Ile Gly Leu Ala
 210 215 220
 Ile Trp Phe Ile Val Gly Leu Gln Phe Lys Gly Asp Ala Asn Thr Gln
 225 230 235 240
 Gln Ile Gln Asn Leu Leu Lys Glu Leu Thr Thr Ile Tyr Asn Leu Asn
 245 250 255
 Phe Trp Val Trp Ile Pro Leu Ile Ile Ile Ile Leu Cys Leu Ile Phe
 260 265 270
 Arg Ile Ser Thr Val Pro Ser Met Leu Ile Ser Ser Ile Ser Ala Leu
 275 280 285
 Val Ile Gly Thr Phe Asp His Gln Phe Asn Met Lys Asp Gly Phe Lys
 290 295 300
 Ala Ser Phe Asp Gly Phe Asn His Thr Met Leu His Gln Ser His Ile
 305 310 315 320
 Ser Asp Asn Ala Lys Thr Leu Ile Glu Gln Gly Gly Met Met Ser Met
 325 330 335
 Thr Gln Ile Ile Val Thr Ile Phe Cys Gly Tyr Ala Phe Ala Gly Ile
 340 345 350
 Val Glu Lys Ala Gly Cys Leu Asp Val Ile Leu Glu Thr Ile Ala Lys
 355 360 365
 Gly Val Lys Ser Val Gly Thr Leu Ile Leu Ile Thr Val Val Cys Ser
 370 375 380
 Ile Met Leu Val Phe Ala Ala Gly Val Ala Ser Ile Val Ile Ile Met
 385 390 395 400
 Val Gly Val Leu Met Lys Asp Met Phe Glu Lys Met Asn Val Ser Lys
 405 410 415
 Ser Val Leu Ser Arg Thr Leu Glu Asp Ser Ser Thr Met Val Leu Pro
 420 425 430
 Leu Ile Pro Trp Gly Thr Ser Gly Ile Tyr Tyr Ala His Gln Leu Asn
 435 440 445
 Val Ser Val Asp Gln Phe Phe Ile Trp Ala Ile Pro Cys Tyr Leu Cys
 450 455 460
 Ala Phe Ile Ala Ile Ile Tyr Gly Phe Thr Gly Ile Gly Ile Lys Lys
 465 470 475 480
 Ile Ser Arg Lys

<210> 6577

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6577

Pro Cys Ser Ser Asn Asn Ala Ala Ala Val Lys Pro Pro Ile Pro Ala
 1 5 10 15
 Pro Thr Ile Ala Ile Phe Met Phe Tyr Thr Ser Asn Leu Ser Phe Phe
 20 25 30
 Ile Ile Leu Ala Tyr Thr His Met Leu Lys Ser Lys Pro Phe Tyr Phe

35
Asn Cys Gln
50

40

45

<210> 6578
<211> 43
<212> PRT
<213> S.epidermidis

<400> 6578

Glu	Leu	Tyr	Ser	Leu	Asn	Leu	Pro	Tyr	Phe	Thr	Ser	Ile	Gln	Leu	Glu
1				5					10				15		
Lys	Asp	Leu	Ile	Ile	Thr	Ala	Ile	Gly	Phe	Ile	Gly	Glu	Asn	His	Phe
			20					25					30		
Asn	Ile	Tyr	Ser	His	Pro	Lys	Arg	Ile	Thr	Asn					
		35					40								

<210> 6579
<211> 86
<212> PRT
<213> S.epidermidis

<400> 6579

Phe	Val	Tyr	Ser	Lys	Tyr	Lys	Glu	Arg	Phe	Arg	Asp	Leu	Met	Gln	Glu
1				5					10				15		
Arg	Tyr	Ser	Arg	Gln	Val	Leu	Phe	Lys	Glu	Ile	Gly	Leu	Lys	Gly	Gln
			20					25					30		
Ser	Leu	Leu	Glu	Lys	Lys	His	Val	Leu	Ile	Val	Ser	Met	Gly	Ala	Leu
		35					40				45				
Gly	Thr	His	Leu	Ala	Glu	Gly	Leu	Val	Arg	Ala	Gly	Ile	Asn	Lys	Leu
	50					55					60				
Thr	Ile	Val	Asp	Arg	Asp	Tyr	Ile	Glu	Phe	Ser	Asn	Leu	Gln	Arg	Gln
65					70				75						80
Thr	Leu	Phe	Tyr	Arg	Ala										
				85											

<210> 6580
<211> 478
<212> PRT
<213> S.epidermidis

<400> 6580

Gly	Gly	Asp	Ser	Met	Ser	Lys	Glu	Glu	Arg	Leu	Ala	Lys	Asp	Ile	Thr
1				5					10					15	
His	Ala	Leu	Gly	Ser	Gln	Asn	Ile	Ser	Asn	Ile	Ile	His	Cys	Met	
			20					25					30		
Thr	Arg	Val	Arg	Ile	Lys	Val	His	Asn	Asp	Ala	Lys	Val	Asn	Tyr	Asp
		35					40					45			
Glu	Leu	Lys	Ser	Ile	Asn	Gly	Val	Leu	Gly	Val	Val	Glu	Asp	Glu	Arg
	50					55					60				
Ile	Gln	Val	Val	Val	Gly	Pro	Gly	Ile	Val	Asn	Lys	Val	Ala	Lys	Leu
65					70				75						80
Met	Ala	Asp	Gln	Ser	Gly	Ala	Thr	Leu	Ala	Glu	Glu	Thr	Thr	Glu	Asn
				85					90					95	
Gln	Ser	Tyr	Lys	Ser	Gln	Ala	Glu	Lys	Arg	Ala	Tyr	Glu	His	Lys	Lys
			100					105						110	

Gln Phe Gln Ser Gln Arg Lys Gln Ser Lys Trp Asn Lys Val Leu Lys
 115 120 125
 Ser Ile Ala Asn Ile Phe Ile Pro Leu Ile Pro Ala Phe Ile Gly Ala
 130 135 140
 Gly Leu Ile Gly Gly Ile Ala Ala Ile Leu Ser Asn Leu Leu Thr Ala
 145 150 155 160
 Gly Ser Ile Ser Gly Gln Trp Ile Gln Gln Ile Val Thr Val Leu Asn
 165 170 175
 Val Ile Lys Asp Gly Met Leu Phe Tyr Leu Ala Ile Phe Thr Gly Ile
 180 185 190
 Asn Ser Ala Lys Val Phe Gly Ala Thr Pro Gly Leu Gly Gly Val Ile
 195 200 205
 Gly Gly Thr Thr Leu Leu Thr Gly Ile Thr Asp Glu Asn Pro Ile Lys
 210 215 220
 Asn Ile Phe Thr Gly Glu His Leu Ala Ala Gly Gln Gly Gly Ile Ile
 225 230 235 240
 Gly Val Ile Phe Ala Val Trp Leu Leu Ser Met Val Glu Lys Arg Leu
 245 250 255
 His Lys Ile Ile Pro Asn Ser Ile Asp Ile Ile Val Thr Pro Thr Ile
 260 265 270
 Thr Leu Leu Leu Ile Gly Leu Leu Thr Ile Phe Ile Ile Met Pro Leu
 275 280 285
 Ala Gly Phe Val Ser Asp Gly Leu Val Tyr Val Ile Asn Trp Ile Ile
 290 295 300
 Gly Val Gly Gly Ile Phe Ser Gly Phe Ile Ile Gly Ala Phe Phe Leu
 305 310 315 320
 Pro Leu Val Met Leu Gly Leu His His Ile Phe Thr Pro Ile His Ile
 325 330 335
 Glu Leu Ile Asn Gln Thr Gly Ser Thr Tyr Leu Leu Pro Ile Ala Ala
 340 345 350
 Met Ala Gly Ala Gly Gln Val Gly Ala Ala Ile Ala Leu Trp Val Arg
 355 360 365
 Cys Gly Lys Asn Lys Glu Leu Arg Asn Thr Leu Lys Gly Ala Leu Pro
 370 375 380
 Val Gly Phe Leu Gly Ile Gly Glu Pro Leu Ile Tyr Gly Val Thr Leu
 385 390 395 400
 Pro Leu Gly Arg Pro Phe Phe Thr Ala Cys Ile Gly Gly Gly Val Gly
 405 410 415
 Gly Ala Val Ile Gly Gly Ile Gly His Ile Gly Ala Thr Ala Val Gly
 420 425 430
 Pro Ser Gly Ile Ser Leu Leu Pro Leu Ile Ala Asn Asn Met Tyr Leu
 435 440 445
 Gly Tyr Ile Val Gly Leu Leu Ala Ala Tyr Thr Gly Gly Phe Ile Phe
 450 455 460
 Thr Tyr Phe Phe Gly Thr Lys Glu Met Arg Asn Pro Glu
 465 470 475

<210> 6581

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6581

Tyr Val Phe Ser Leu Gln Thr Tyr Ser Phe Phe Leu Ile Leu His Tyr
 1 5 10 15
 Ile Ser Val Leu Ser Leu Ile Leu Leu Lys Glu His Leu Leu Glu Tyr

245 250 255
 Gly Pro Gln Asp Ser Tyr Leu Leu Ile Arg Gly Ile Lys Thr Leu Gly
 260 265 270
 Leu Arg Met Glu Gln Ile Asn Arg Asn Val Glu Gly Ile Val Gln Met
 275 280 285
 Leu Gln Lys His Pro Lys Val Gln Gln Val Phe His Pro Ser Ile Lys
 290 295 300
 Glu His Met Asn Tyr Thr Ile His Gln Asn Gln Ala Thr Gly His Thr
 305 310 315 320
 Gly Val Val Ser Phe Glu Val Lys Asp Thr Glu Ala Ala Lys Gln Val
 325 330 335
 Ile His Ala Thr Asn Tyr Phe Thr Leu Ala Glu Ser Leu Gly Ala Val
 340 345 350
 Glu Ser Leu Ile Ser Val Pro Ala Leu Met Thr His Ala Ser Ile Pro
 355 360 365
 Ser Asp Val Arg Ala Lys Glu Gly Ile Thr Asp Gly Leu Ile Arg Leu
 370 375 380
 Ser Ile Gly Ile Glu Asp Thr Glu Asp Leu Val Asn Asp Leu Glu Gln
 385 390 395 400
 Ala Leu Asn Thr Leu Arg
 405

<210> 6584
 <211> 84
 <212> PRT
 <213> S.epidermidis

<400> 6584
 Ile Tyr Gln Ser Pro Val Ala Ile Tyr Asn Lys Met Thr Ala Ile Asn
 1 5 10 15
 Asn Asp Asn His Ala Asn Ile Asn Asp Gln Ala Glu Ile Leu Ala Ala
 20 25 30
 Ser Leu Gly Thr Phe His Asn Leu Leu Thr Leu Met Ser Arg Val Asn
 35 40 45
 Thr Asn Asn Val Ala Pro Gln Asn Met Val Ile Asn Leu Lys Ser Pro
 50 55 60
 Leu Asn His Ala Asn Glu Ala Asn Ala Val Ile Asn Val Lys Asn Gly
 65 70 75 80
 Lys Tyr Leu Arg

<210> 6585
 <211> 81
 <212> PRT
 <213> S.epidermidis

<400> 6585
 Thr Ala Arg Ser Ser Lys Ser His Lys Val Val Leu Ser Ser Asp Cys
 1 5 10 15
 Ser Leu Gln Leu Asp Tyr Met Lys Leu Glu Ser Leu Val Ile Val Asp
 20 25 30
 Gln His Ala Thr Val Asn Thr Phe Pro Gly Leu Val His Thr Ala Arg
 35 40 45
 His Thr Thr Arg Val Cys Asn Thr Arg Ser Arg Trp Ser Asn His Leu
 50 55 60
 Glu Leu Ala Val Glu Gly Gly Thr Asn Asp Trp Gly Glu Val Val Thr

65
Arg

70

75

80

<210> 6586
<211> 312
<212> PRT
<213> S.epidermidis

<400> 6586

Tyr Ser Leu Leu Ser Ser Glu Pro Lys Ile Met Ile Ala Tyr Asp Leu
1 5 10 15
Ile Gly Gln Thr Pro Leu Val Leu Leu Glu Ser Phe Ser Asp Glu Asn
20 25 30
Val Lys Ile Tyr Ala Lys Leu Glu Gln Phe Asn Pro Gly Gly Ser Ile
35 40 45
Lys Asp Arg Leu Gly Lys Tyr Leu Ile Glu Lys Ala Ile Asp Glu Gly
50 55 60
Arg Leu Lys Glu Gly Asp Thr Ile Val Glu Ala Thr Ala Gly Asn Thr
65 70 75 80
Gly Ile Gly Leu Ala Ile Ala Ser Asn Arg His Lys Val Lys Cys Ile
85 90 95
Ile Phe Ala Pro Glu Gly Phe Ala Glu Glu Lys Ile Ser Ile Met Lys
100 105 110
Ala Leu Gly Ala Asp Val Arg Arg Thr Pro Lys Ala Glu Gly Met Thr
115 120 125
Gly Ala Gln Gln Glu Ala Leu Ala Tyr Ala Thr Arg Tyr Gly Tyr Leu
130 135 140
Tyr Met Asn Gln Phe Glu Thr Lys Asp Asn Pro Gly Ala Tyr Thr Gln
145 150 155 160
Thr Leu Ala Lys Gln Leu Thr Asp Glu Leu Ser His Ile Asp Tyr Phe
165 170 175
Val Ala Gly Val Gly Ser Gly Gly Thr Phe Thr Gly Val Ala Gln His
180 185 190
Leu Lys Thr Tyr Asp Val Lys Asn Tyr Ile Val Glu Pro Glu Gly Ser
195 200 205
Val Leu Asn Gly Gly Val Ser His Pro His Ala Thr Glu Gly Ile Gly
210 215 220
Ser Glu Lys Trp Pro Ser Phe Leu Glu Lys Glu Leu Val Asp Gly Ile
225 230 235 240
Phe Thr Val Ala Asp Lys Asp Ala Phe Asn Asn Val Lys Leu Val Ala
245 250 255
Asn Lys Glu Gly Leu Leu Val Gly Ser Ser Ser Gly Ala Ala Leu Gln
260 265 270
Gly Ala Leu Glu Leu Lys Lys Ser Ile Gln Asn Gly Val Ile Val Thr
275 280 285
Ile Phe Pro Asp Gly Ser Asp Arg Tyr Met Ser Lys Gln Ile Phe Asn
290 295 300
Tyr Lys Glu Ser Phe Asn Asn Glu
305 310

<210> 6587
<211> 274
<212> PRT
<213> S.epidermidis

<400> 6587

Cys Met Asp Pro Tyr Lys Val Leu Ile Glu Val Met Lys Thr Glu Ser
 1 5 10 15
 Phe Thr Arg Ala Ala Glu Asn Leu Tyr Thr Ser Gln Pro Ser Val Ser
 20 25 30
 Arg Asp Ile Lys Arg Leu Glu Leu Lys Tyr Asn Val Lys Ile Phe Glu
 35 40 45
 Phe Lys Ser Pro Tyr Leu Lys Leu Thr Arg Asp Gly Glu Lys Leu Leu
 50 55 60
 Gln Tyr Ala Leu Gln Arg Glu Ser Ile Glu Gln Glu Leu Trp Gln Asn
 65 70 75 80
 Leu Thr Ser Glu Ser Glu Ile Ile Ser Gly Thr Leu Thr Ile Gly Ser
 85 90 95
 Ser Tyr Thr Tyr Gly Glu Tyr Leu Leu Ser Glu Gln Leu Thr Ser Leu
 100 105 110
 Met Gln Gln Tyr Pro Lys Leu His Ile His Leu Arg Val Asn Asn Ser
 115 120 125
 Asp Ser Val Ile Asn Asp Ile Lys His Asn Arg Val Asp Ile Gly Ile
 130 135 140
 Val Glu Lys Glu Ile Gln Asp Asn Ala Ile Lys Cys Lys Glu Ile Met
 145 150 155 160
 Glu Asp Glu Met Val Tyr Ile Tyr Lys Lys Ser Ile Gln Pro Arg Met
 165 170 175
 Asp Ile Cys Phe Val Arg Glu Lys Gly Ser Gly Thr Arg Phe Tyr Gln
 180 185 190
 Glu Val Gly Leu Ser Glu Leu Lys Leu Asn Pro Tyr Leu Ile Glu Ile
 195 200 205
 Asn Asn Ile Lys Ile Ile Lys Gln Met Val Glu Ala Gly Asn Gly Phe
 210 215 220
 Ala Ile Ile Ser Lys Ser Ala Leu His Pro Glu Asp Tyr Glu Lys Leu
 225 230 235 240
 Met Ile Thr Thr Leu Asn Val Lys Arg His Tyr Tyr Leu Ala Gln His
 245 250 255
 Val Asp Lys Tyr Ile Gly Glu Asn Ile Arg Ala Val Ile Glu Met Ile
 260 265 270
 Met Lys

<210> 6588

<211> 42

<212> PRT

<213> S.epidermidis

<400> 6588

Asn Leu Ser Leu Lys Asn Val Asn Ile Asn Val Pro Lys Asn Arg Gln
 1 5 10 15
 Leu Lys Ile Ile Ile Ile Gln Val Lys Gly Val Leu Lys Lys Phe Leu
 20 25 30
 Asp Cys Ile Leu Lys Pro Gln Phe Ser Thr
 35 40

<210> 6589

<211> 100

<212> PRT

<213> S.epidermidis

<400> 6589

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Arg Leu Pro Pro Thr Tyr Tyr Arg Gly Cys Trp His Val Val Ser Arg
1          5          10          15
Gly Phe Leu Ile Arg Tyr Arg Gln Asp Val His Ser Tyr Leu His Ile
          20          25          30
Cys Ser Ser Leu Ile Thr Glu Phe Tyr Asp Pro Lys Thr Phe Ile Thr
          35          40          45
His Ala Ala Leu Leu Arg Gln Ala Phe Ala His Cys Gly Arg Phe Pro
          50          55          60
Thr Ala Ala Ser Arg Arg Ser Leu Asp Arg Val Ser Val Pro Val Trp
65          70          75          80
Pro Ile Thr Leu Ser Gly Arg Leu Arg Ile Val Ala Leu Val Ser Arg
          85          90          95
Tyr Leu Thr Asn
          100

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<210> 6590

<211> 184

<212> PRT

<213> S.epidermidis

<400> 6590

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Gly Ala Ala Leu Ile Met Thr Lys Gln Asp Leu Ser Leu Ser Val Phe
1          5          10          15
Thr Asn Glu Asn Tyr Lys Asn Leu His Tyr Thr Ser Ser Ser Phe Arg
          20          25          30
Asn Ser Met Tyr Asp Glu Leu Glu Val Asn Lys Ser Arg Phe Lys Asn
          35          40          45
Cys Asn Phe Asn Glu Gly Ile Phe Lys Asn Ile Glu Ala Ile Cys Asn
          50          55          60
Cys Lys Phe Thr Thr Cys Gly Phe Asn Asn Cys Ile Phe Glu Asp Val
65          70          75          80
His Phe Tyr Lys Asn Gln Phe Lys Asp Ser Thr Phe Val Asn Thr Pro
          85          90          95
Phe Asp Gln Ser Val Phe Asn Ser Thr Leu Phe Gln Asn Ala Met Phe
          100          105          110
Asp Ser Asn Leu Ile Arg Ser Val Lys Trp Thr Asp Ile Ile Phe Lys
          115          120          125
Asn Val Ser Phe Lys Asn Val Glu Ile Glu Gly Thr Thr Phe Lys Asp
          130          135          140
Val Lys Phe Lys Asn Cys Glu Phe Lys Asn Val Ile Ile Thr Asn Ser
145          150          155          160
Thr Met Ser Gln Lys Leu Met Asn Glu Leu Gln Lys Gln Asp Val Thr
          165          170          175
Leu Glu Asn Ile Asp Thr Ser Ile
          180

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<210> 6591

<211> 40

<212> PRT

<213> S.epidermidis

<400> 6591

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Ile Lys Lys Pro Val Asn Glu Phe Met Lys Thr His Leu Leu Ser Ile
1          5          10          15
Leu Ile Gly Ile Met Ser Gln Ala Leu Tyr Pro Thr Ile Ser Gln Val

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			20					25				30			
Leu	Ile	Ile	Lys	Ile	Ser	Ile	Thr								
		35					40								
<210>	6592														
<211>	410														
<212>	PRT														
<213>	S.epidermidis														
<400>	6592														
Leu	Leu	Phe	Thr		Glu	Arg	Val	Leu	Glu	Met	Ala	Lys	Ile	Pro	Val
1				5					10					15	
Thr	Val	Leu	Ser	Gly	Tyr	Leu	Gly	Ser	Gly	Lys	Thr	Thr	Leu	Leu	Asn
			20					25					30		
His	Ile	Leu	Lys	Asn	Arg	Glu	Gly	Arg	Arg	Ile	Ala	Val	Ile	Val	Asn
		35					40					45			
Asp	Met	Ser	Glu	Val	Asn	Ile	Asp	Lys	Asp	Leu	Val	Ala	Gln	Gly	Gly
	50			.		55					60				
Gly	Leu	Ser	Arg	Thr	Asp	Glu	Lys	Leu	Val	Glu	Leu	Ser	Asn	Gly	Cys
65					70					75				80	
Ile	Cys	Cys	Thr	Leu	Arg	Asp	Asp	Leu	Leu	Arg	Glu	Val	Glu	Arg	Leu
				85					90					95	
Val	His	Lys	Gly	Gly	Ile	Asp	Gln	Ile	Val	Ile	Glu	Ser	Thr	Gly	Ile
			100				105						110		
Ser	Glu	Pro	Val	Pro	Val	Ala	Gln	Thr	Phe	Ser	Tyr	Ile	Asp	Glu	Glu
		115					120					125			
Leu	Gly	Ile	Asp	Leu	Thr	Ser	Ile	Cys	Arg	Leu	Asp	Thr	Met	Val	Thr
		130				135					140				
Val	Val	Asp	Ala	Asn	Arg	Phe	Val	Asn	Asp	Ile	Arg	Ser	Glu	Asp	Leu
145					150					155					160
Leu	Ala	Asp	Arg	Asp	Glu	Ser	Val	Asp	Asp	Glu	Asp	Glu	Arg	Thr	Ile
				165					170					175	
Ala	Asp	Leu	Leu	Ile	Asp	Gln	Val	Glu	Phe	Cys	Asp	Val	Met	Ile	Ile
			180					185					190		
Asn	Lys	Ile	Asp	Leu	Ile	Ser	Asp	Glu	Ala	Leu	Glu	Lys	Leu	Glu	Asn
		195					200					205			
Val	Leu	Arg	Ala	Leu	Gln	Pro	Glu	Ala	Lys	Ile	Ile	Lys	Thr	Val	Asn
	210					215					220				
Ala	Lys	Val	Glu	Leu	Ser	Asp	Val	Leu	Asn	Thr	Gln	Leu	Phe	Asp	Phe
225					230					235					240
Glu	Lys	Ala	Ser	Glu	Ser	Ala	Gly	Trp	Ile	Lys	Glu	Leu	Thr	Ala	Gly
				245					250					255	
Gly	His	Ala	Thr	His	Thr	Pro	Glu	Thr	Glu	Glu	Tyr	Gly	Ile	Thr	Ser
			260					265					270		
Phe	Ala	Tyr	Thr	Arg	Arg	Leu	Pro	Phe	His	Ala	Lys	Arg	Phe	His	Gln
		275					280					285			
Trp	Leu	Glu	Gln	Met	Pro	Glu	Asn	Ile	Val	Arg	Thr	Lys	Gly	Ile	

Gly Thr Asp Leu Asp Gln Glu Lys Ile Ser Arg Glu Leu Asp Ala Cys
 370 375 380
 Leu Ile His Ser Ser Glu Ile Asp Glu Asp Trp Arg Leu Leu Asp Ser
 385 390 395 400
 Pro Tyr Gln Trp Thr Tyr Asp Arg Arg Met
 405 410

<210> 6593
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 6593
 Lys Leu Cys Thr Tyr Asn Glu Tyr Ala Ala Tyr Ser Arg Asn Ile Phe
 1 5 10 15
 Met Met Tyr Asn Leu Val Ala Gln Ile Cys Ala Val Ser Phe Thr Val
 20 25 30
 Gln Ile Trp Thr Val Ile Tyr Thr Asn Leu Phe Thr Ser His Thr Val
 35 40 45
 Phe

<210> 6594
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6594
 Ile Asn Arg Thr Leu Tyr Leu Asn Lys Leu Pro Ile Ser Phe Cys Ser
 1 5 10 15
 Lys Val Arg Thr Leu Ser Pro Leu Ser Ile Lys Val Ile Gln Pro Lys
 20 25 30
 Ile Ala Lys Ala Arg Leu Ser Tyr Tyr Leu Phe Glu
 35 40

<210> 6595
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6595
 Ser Phe Tyr Thr Phe Tyr Ser Tyr Cys Gln Lys Tyr Cys Phe Leu Lys
 1 5 10 15
 Val Thr Arg Cys Phe Gln Tyr Thr Ile Ser Lys His Leu Ala Thr Glu
 20 25 30
 Phe Lys Phe Lys Glu Phe Ser Arg Arg Arg
 35 40

<210> 6596
 <211> 86
 <212> PRT
 <213> S.epidermidis

<400> 6596
 Gly Gly Asp Thr Leu Phe Thr Lys Lys Ile Leu Ile Tyr Ile Ala Leu
 1 5 10 15

6593-6596: PRT

Leu Ile Thr Leu Ile Arg Phe Phe Ile Pro Leu His Pro Asp Phe Asp
 20 25 30
 Thr Leu Leu Val Trp Leu Phe Ile Leu Tyr Ile Ile Pro Ile Ile Leu
 35 40 45
 Cys Ile Ile Gly Phe Lys Ser Asp Lys Leu Ile Ala Thr Met Ile Met
 50 55 60
 Ile Pro Asn Leu Met Gly Ile Gly Tyr Arg Ile Phe Ile Phe Phe Asn
 65 70 75 80
 Asp Phe Leu His Leu Lys
 85

<210> 6597

<211> 564

<212> PRT

<213> S.epidermidis

<400> 6597

Thr Lys Leu Thr Arg Cys Leu Met Tyr Lys Asp Tyr Asn Met Thr Gln
 1 5 10 15
 Leu Thr Leu Pro Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile
 20 25 30
 Ser Arg His Val Asn Asp Ile Val Glu Thr Ile Pro Glu Thr Glu Phe
 35 40 45
 Asp Glu Phe Arg His His Arg Gly Ala Thr Ser Tyr His Pro Lys Met
 50 55 60
 Met Leu Lys Val Val Leu Tyr Ala Tyr Thr Gln Ser Val Phe Ser Gly
 65 70 75 80
 Arg Lys Ile Glu Lys Leu Leu Asn Asp Ser Ile Arg Met Met Trp Leu
 85 90 95
 Ser Gln Asn Gln Lys Pro Ser Tyr Lys Thr Ile Asn Arg Phe Arg Val
 100 105 110
 Asn Pro Lys Val Asp Ala Leu Leu Glu Ser Leu Phe Ile Gln Phe His
 115 120 125
 Ser Gln Cys Leu Lys Gln Asn Leu Ile Asp Asp Gln Ala Ile Phe Ile
 130 135 140
 Asp Gly Thr Lys Val Glu Ala Asn Ala Asn Arg Tyr Thr Phe Val Trp
 145 150 155 160
 Lys Lys Ser Ile Gln Asn His Glu Ser Arg Met Asn Glu Asn Ser Lys
 165 170 175
 Ala Leu Tyr His Glu Leu Val Ile Asn Lys Ile Ile Pro Glu Ile Lys
 180 185 190
 Lys Asp His Asp Asn Asp Leu Thr Lys Glu Glu Ile Asp Leu Ile Gly
 195 200 205
 Ser His Leu Asp Lys Glu Ile Glu Asp Leu Asn Gln His Ile Asp Asn
 210 215 220
 Glu Lys Cys Thr Lys Ile Arg Lys Gln Ile Arg Leu Lys Arg Thr Lys
 225 230 235 240
 Ile Lys Lys Tyr Lys Lys Gln Ile Asn Asp Tyr Ser Gln Arg Lys His
 245 250 255
 Lys Tyr Glu Val Gln Lys Ser Ile Leu Lys Asp Arg Asn Ser Tyr Ser
 260 265 270
 Lys Thr Asp His Asp Ala Thr Phe Met Arg Met Lys Glu Asp His Met
 275 280 285
 Lys Asn Gly Gln Leu Lys Pro Gly Tyr Asn Leu Gln Ile Ala Thr Asn
 290 295 300
 Ser Gln Phe Val Leu Phe Tyr Asp Val Tyr Gln Asn Pro Thr Asp Thr

305 310 315 320
 Arg Thr Met Ile Pro Phe Leu Asn Thr Ile Gln Glu Thr Tyr Gly His
 325 330 335
 Leu Pro Glu Tyr Ile Val Ala Asp Ala Gly Tyr Gly Ser Glu Ala Asn
 340 345 350
 Tyr Met Ala Ile Ile Asp Asn Phe Asn Arg Thr Pro Leu Ile Thr Tyr
 355 360 365
 Gly Met Phe Ile Lys Asp Lys Thr Lys Lys Tyr Lys Ser Asp Ile Phe
 370 375 380
 Asn Thr Gln Asn Trp Asp Tyr Asp Glu Ile Asn Asp Glu Phe Ile Cys
 385 390 395 400
 Pro Asn Asn Lys Arg Leu Gly Phe Lys Arg Tyr Ala Tyr Arg His Asp
 405 410 415
 Lys Tyr Gly Phe Lys Arg Asp Phe Lys Leu Tyr Glu Cys Asp Asp Cys
 420 425 430
 Ser Glu Cys Pro Leu Lys Gln Gln Cys Met Asn Phe Asn Ser Lys Thr
 435 440 445
 Asn Lys Lys Ile Met Lys Asn Tyr Asn Trp Glu Tyr Phe Lys Ala Gln
 450 455 460
 Ile Asn Lys Lys Leu Ser Glu Pro Lys Thr Lys Thr Ile Tyr Ser Gln
 465 470 475 480
 Arg Lys Ile Asp Val Glu Pro Val Phe Gly Phe Met Lys Ala Ile Leu
 485 490 495
 Gly Phe Thr Arg Met Ser Val Arg Gly Ile Asp Lys Ala Lys Arg Glu
 500 505 510
 Leu Gly Phe Val Leu Met Ala Leu Asn Ile Arg Lys Val Thr Ala Gln
 515 520 525
 Arg Ala Glu Asn Asn Gln Lys Asn Asn Lys Lys Asp Asn Phe Tyr Ile
 530 535 540
 Ile Ser Ile Glu Ile Val Phe Phe Tyr Leu Ser Trp Asp Phe Met Ser
 545 550 555 560
 His Thr His Phe

<210> 6598

<211> 50

<212> PRT

<213> S.epidermidis

<400> 6598

Gln Tyr Ile Thr Ile Lys Leu Ser Pro Leu Met Ile Gly Leu Arg Ile
 1 5 10 15
 Ile Asn Gly Leu Asn Tyr Ser Phe Ile Lys Met Leu Pro Asn Leu Tyr
 20 25 30
 Asn Ile Gly Lys Leu Asp Tyr Phe Asn Lys Ser Lys Leu Cys Ile Ser
 35 40 45
 Cys Leu
 50

<210> 6599

<211> 62

<212> PRT

<213> S.epidermidis

<400> 6599

Val Ile Gln Thr Ile Lys Leu Ser Tyr Lys Tyr Ile Gly Met Leu Leu

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<210> 6600
<211> 262
<212> PRT
<213> S.epidermidis
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<210> 6601
<211> 63
<212> PRT
<213> S.epidermidis
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<400> 6601
Glu Leu His Ala Tyr Ile Leu Thr Lys Ile Phe Ser Pro Thr Leu Asn

1		5		10		15									
Arg	Lys	Tyr	Ser	Val	His	Phe	Met	Tyr	Ser	His	Asn	Arg	Glu	Ile	Ile
		20						25					30		
Tyr	Asp	Phe	Asp	Gln	Phe	Ser	Asn	Arg	Leu	Val	Leu	Ala	Leu	Ile	Ile
		35					40					45			
Val	Tyr	Ser	Val	Met	Ser	Leu	Cys	Pro	Val	Leu	Thr	Phe	Ala	Phe	
	50					55					60				

<210> 6602

<211> 63

<212> PRT

<213> S.epidermidis

<400> 6602

Cys	Gln	Cys	Ala	Lys	Gly	Ser	Cys	Ser	Asn	Asn	Gly	Ser	Asn	Ile	Phe
1				5					10					15	
Phe	Leu	His	Leu	Lys	Ser	Ser	Ser	Thr	Leu	Gly	Phe	Val	Tyr	Ser	Arg
			20					25					30		
Phe	Asn	Asn	Thr	Lys	Ile	Leu	Tyr	Ser	Leu	Ile	Met	Tyr	Ser	Met	Phe
		35					40					45			
Ala	Leu	Asp	Asp	Ile	Leu	Ile	Thr	Asn	Ile	Ile	Leu	Asn	Lys	Lys	
	50					55					60				

<210> 6603

<211> 452

<212> PRT

<213> S.epidermidis

<400> 6603

His	Phe	Ser	Ala	Leu	Lys	Gly	Val	Gly	Asn	Leu	Ser	Gly	His	Ser	Gln
1				5					10					15	
Trp	Lys	Thr	Ser	Thr	Gly	Phe	Ile	Leu	Ala	Ser	Ala	Gly	Ser	Ala	Ile
			20					25					30		
Gly	Leu	Gly	Ala	Met	Trp	Lys	Phe	Pro	Tyr	Met	Ala	Gly	Ile	Tyr	Gly
		35					40					45			
Gly	Gly	Ala	Phe	Leu	Leu	Met	Phe	Leu	Ile	Phe	Thr	Ile	Phe	Val	Gly
	50					55					60				
Leu	Pro	Leu	Leu	Ile	Met	Glu	Phe	Thr	Val	Gly	Lys	Met	Gly	Arg	Thr
65					70					75				80	
Tyr	Thr	Thr	Gln	Ile	Tyr	Lys	Lys	Leu	Thr	Gly	Lys	Lys	Trp	Leu	Asn
			85					90					95		
Ile	Ile	Gly	Trp	Asn	Gly	Asn	Leu	Ala	Val	Phe	Ile	Leu	Phe	Gly	Phe
		100					105					110			
Tyr	Ser	Val	Ile	Gly	Gly	Trp	Ile	Ile	Ile	Tyr	Ile	Gly	Tyr	Val	Ile
		115					120					125			
Ala	Gln	Ile	Met	Val	Phe	Lys	Ser	Ser	Thr	Leu	Thr	Asn	Ile	Gln	Phe
	130					135					140				
Glu	Thr	Ile	Ile	Ser	Asn	Pro	Trp	Leu	Thr	Val	Leu	Gly	Gln	Gly	Ile
145					150					155				160	
Phe	Ile	Leu	Ile	Thr	Met	Val	Ile	Val	Met	Leu	Gly	Val	Glu	Lys	Gly
			165						170					175	
Leu	Glu	Lys	Ala	Ser	Lys	Ile	Met	Met	Pro	Leu	Leu	Phe	Ile	Phe	Leu
			180				185						190		
Ile	Ile	Val	Val	Ala	Gln	Ser	Leu	Thr	Leu	Glu	Gly	Ala	Leu	Glu	Gly
		195				200						205			
Val	Arg	Tyr	Ile	Leu	Gln	Pro	Arg	Val	Glu	Asp	Met	Ser	Ile	Gln	Gly

210 215 220
 Val Leu Phe Ala Leu Gly Gln Ser Phe Phe Thr Leu Ser Leu Gly Thr
 225 230 235 240
 Thr Gly Met Ile Thr Tyr Ala Ser Tyr Ala Pro Lys Asn Met Thr Ile
 245 250 255
 Lys Ser Ser Ala Leu Ser Ile Val Val Met Asn Ile Leu Ile Ser Val
 260 265 270
 Leu Ala Gly Leu Ala Ile Phe Pro Ala Leu Lys Thr Phe Gly Tyr Gln
 275 280 285
 Pro Gln Glu Gly Pro Gly Leu Leu Phe Lys Val Leu Pro Leu Val Phe
 290 295 300
 Ser Glu Met Thr Phe Gly Thr Phe Phe Tyr Phe Ile Phe Leu Leu Leu
 305 310 315 320
 Phe Leu Phe Ala Ala Leu Thr Ser Ser Ile Ser Leu Leu Glu Leu Asn
 325 330 335
 Val Ser Asn Phe Thr Lys Asn Asp Asn Ser Lys Arg Gln Lys Val Ala
 340 345 350
 Ile Ile Gly Ser Ile Leu Val Phe Ile Ile Ser Ile Pro Ala Thr Leu
 355 360 365
 Ser Phe Ser Ser Leu Ser His Leu Arg Phe Gly Ala Gly Thr Ile Phe
 370 375 380
 Asp Asn Met Asp Phe Ile Val Ser Asn Ile Leu Met Pro Leu Gly Ala
 385 390 395 400
 Leu Gly Thr Thr Leu Val Val Gly Gln Leu Leu Asp Lys Lys Leu Leu
 405 410 415
 Lys Glu Ser Phe Gly Lys Asp Lys Phe Asn Leu Phe Leu Pro Trp Tyr
 420 425 430
 Tyr Leu Ile Lys Phe Ile Met Pro Ile Val Ile Ile Leu Val Phe Ile
 435 440 445
 Val Gln Leu Phe
 450

<210> 6604
 <211> 199
 <212> PRT
 <213> S.epidermidis

<400> 6604
 Asn Met His Tyr Pro Glu Pro Ile Ser Lys Leu Ile Asp Ser Phe Met
 1 5 10 15
 Lys Leu Pro Gly Ile Gly Pro Lys Thr Ala Gln Arg Leu Ala Phe His
 20 25 30
 Thr Leu Asp Met Lys Glu Asp Asp Val Val Lys Phe Ala Lys Ala Leu
 35 40 45
 Val Asp Val Lys Arg Glu Leu Thr Tyr Cys Ser Val Cys Gly His Ile
 50 55 60
 Thr Glu Asn Asp Pro Cys Tyr Ile Cys Glu Asp Lys Gln Arg Asp Arg
 65 70 75 80
 Ser Val Ile Cys Val Val Glu Asp Asp Lys Asp Val Ile Ala Met Glu
 85 90 95
 Lys Met Arg Glu Tyr Lys Gly Leu Tyr His Val Leu His Gly Ser Ile
 100 105 110
 Ser Pro Met Asp Gly Ile Gly Pro Glu Asp Ile Asn Ile Pro Ala Leu
 115 120 125
 Val Glu Arg Leu Lys Asn Asp Glu Val Lys Glu Leu Ile Leu Ala Met
 130 135 140

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<210> 6605
<211> 876
<212> PRT
<213> S.epidermidis
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Asn	Pro	Ile	Tyr	Arg	Lys	Ser	Ser	Ile	Ile	Phe	Lys	Thr	Ile	Leu	Val
1				5					10					15	
Lys	Glu	Asp	Arg	Ile	Met	Leu	Gln	Ser	Asp	Ile	Asn	Glu	Leu	Val	Asn
			20					25					30		
Gln	Ala	Lys	Arg	Val	Ile	Thr	Pro	Leu	Ser	Pro	Ile	Ser	Thr	Phe	Ala
		35					40					45			
Ala	Arg	Asn	Pro	Trp	Glu	Gly	Leu	Glu	Asp	Ala	Ser	Phe	Asp	Gln	Val
	50					55					60				
Ala	Arg	Trp	Leu	Lys	Ser	Val	Arg	Asp	Ile	Asp	Ile	Tyr	Pro	Asn	Ala
65					70					75				80	
Ser	Thr	Ile	His	Arg	Ala	Ile	Ser	Asn	Lys	Glu	Ile	Asp	Leu	Lys	Val
				85					90					95	
Phe	Glu	Glu	Arg	Leu	Asp	Glu	Asn	Arg	Ala	His	Tyr	Asn	Asn	Arg	Ser
			100					105					110		
Leu	Ser	Asp	Ser	Asp	Ile	Asn	Thr	Tyr	Ile	Gln	Arg	Ala	Lys	Asn	Leu
		115					120					125			
Lys	Thr	Ile	Glu	Glu	Gly	Tyr	Phe	Asn	Thr	Lys	Asp	Asn	Glu	Lys	Leu
		130				135					140				
Glu	Lys	Trp	Val	Gln	Thr	Asn	Phe	Lys	Asp	Tyr	Lys	Lys	Lys	Glu	Asp
145					150					155				160	
Val	Ile	Ala	Gln	Ser	Ala	Ser	Val	Phe	Thr	Lys	Glu	Gly	Thr	Arg	Leu
				165					170					175	
Ile	Asp	Ile	Leu	Asn	Ala	His	Met	Ile	Lys	Trp	Ser	Lys	Leu	Tyr	Val
			180					185					190		
Asp	Asp	Phe	Gln	Ser	Ser	Trp	Thr	Met	Pro	Lys	Arg	Glu	Lys	Gly	Phe
		195					200					205			
Tyr	His	Ala	Trp	Gln	Arg	Leu	Val	Lys	His	Asp	Pro	Leu	Phe	Thr	Lys
		210				215					220				
Lys	Gln	Arg	Leu	Thr	Leu	Thr	His	Leu	Pro	Asn	Gln	Ala	Thr	Glu	Ala
225					230					235				240	
Ile	Glu	Tyr	Ala	Phe	Gln	Glu	Leu	Gly	Val	Lys	Glu	Glu	His	Arg	Gln
				245					250					255	
Ser	Tyr	Ile	Glu	Ser	His	Leu	Leu	Ser	Leu	Pro	Gly	Trp	Ala	Gly	Ile
			260					265					270		
Met	Tyr	His	Arg	Ser	Gln	Thr	Gln	Ser	Asn	Asp	Ala	Tyr	Leu	Leu	Thr
		275					280					285			
Asp	Tyr	Val	Ala	Ile	Arg	Leu	Ser	Ile	Glu	Met	Val	Leu	Leu	Asn	Asp
		290				295					300				
His	His	Thr	Thr	Leu	Leu	Lys	Lys	Ser	Ile	Tyr	Leu	Gln	Lys	Lys	Leu
305					310					315					320
Glu	Gln	Ile	Arg	Tyr	Leu	Leu	Phe	Asn	Ile	Gln	Met	Asn	Val	Glu	Gln

Trp	Leu	Asn	Leu	Ser	Ser	Lys	Lys	Gln	Gln	Ala	Tyr	Ile	Glu	Leu	Gly
			340					345					350		
Thr	Arg	Phe	Ser	Pro	Phe	Tyr	Phe	Lys	Lys	Leu	Trp	Leu	Asp	Ala	Trp
		355					360					365			
Glu	Glu	Thr	His	Glu	Arg	Arg	Leu	Val	Asp	Glu	Ile	Tyr	Arg	Val	Pro
		370				375					380				
Thr	Glu	Asp	Thr	Asp	Gln	Ala	Lys	Ala	Lys	Val	Gln	Leu	Ala	Phe	Cys
385					390					395					400
Ile	Asp	Val	Arg	Ser	Glu	Pro	Phe	Arg	Arg	His	Leu	Glu	Ser	Glu	Gly
				405					410					415	
Pro	Phe	Glu	Thr	Ile	Gly	Ile	Ala	Gly	Phe	Phe	Gly	Leu	Pro	Ile	Gln
			420					425					430		
Lys	Glu	Val	Leu	Asp	Glu	Gln	Phe	Ala	His	Pro	Ser	Leu	Pro	Val	Met
		435					440					445			
Val	Glu	Pro	Ala	Tyr	Arg	Ile	Lys	Glu	Tyr	Ala	Asp	Gln	His	Glu	Met
	450					455					460				
Lys	Ile	Tyr	Asn	Gln	Gln	Gln	His	Thr	Leu	Thr	Ser	Met	Phe	Tyr	Asn
465				470						475					480
Phe	Lys	Leu	Met	Lys	Asn	Asn	Val	Leu	Pro	Ser	Leu	Leu	Leu	Pro	Glu
				485					490					495	
Leu	Ser	Gly	Pro	Phe	Leu	Ser	Ile	Ala	Thr	Ile	Ala	Asn	Thr	Ile	Phe
			500					505					510		
Pro	Lys	Lys	Ala	Lys	Arg	Ile	Val	His	Arg	Phe	Ser	Gln	Lys	Trp	Leu
		515					520					525			
Arg	Lys	Pro	Thr	Gly	Lys	Leu	Thr	Ile	Gln	Arg	Glu	Gln	Asp	Ala	Tyr
	530					535					540				
Ser	Lys	Leu	Pro	Ile	Gly	Phe	Thr	Leu	Glu	Glu	Gln	Ile	Gln	Phe	Ser
545				550						555					560
Lys	Lys	Ala	Leu	Gln	Leu	Met	Asp	Leu	Thr	Asp	Asp	Phe	Ala	Pro	Leu
				565					570					575	
Ile	Val	Leu	Cys	Gly	His	Gly	Ser	Glu	Ser	His	Asn	Asn	Pro	Tyr	His
			580					585					590		
Ala	Ser	Leu	Glu	Cys	Gly	Ala	Cys	Gly	Gly	Ala	Ser	Ser	Gly	Phe	Asn
		595					600					605			
Ala	Lys	Leu	Leu	Ala	Val	Met	Cys	Asn	Gln	Glu	Asn	Val	Arg	Arg	Gly
	610					615					620				
Leu	Leu	Met	Glu	Gly	Ile	Asp	Ile	Pro	Arg	His	Thr	Val	Phe	Ile	Ala
625				630						635					640
Ala	Glu	His	Gln	Thr	Ser	Val	Asp	Glu	Leu	Glu	Tyr	Ile	Tyr	Val	Pro
			645						650					655	
Pro	Leu	Thr	Thr	Glu	Ala	Gln	Asn	Ala	Phe	Asp	Glu	Leu	Lys	His	Val
			660					665					670		
Met	Pro	Lys	Val	Cys	Tyr	Lys	Thr	Asn	Leu	Glu	Arg	Leu	Ala	Ser	Leu
		675													

770 775 780
 Tyr Gly Ser Gly Ser Lys Thr Thr Gln Thr Val Thr Ser Gly Val Gly
 785 790 795 800
 Val Met Gln Gly Asn Ala Ser Asp Leu Met Tyr Gly Leu Pro Trp Gln
 805 810 815
 Ser Val Met Met Asn Asp Lys Glu Ala Tyr His Ala Pro Ile Arg Leu
 820 825 830
 Leu Ile Val Ile Gln Ala Pro Asp Ala Tyr Ile Gln Arg Leu Leu Lys
 835 840 845
 His His Asn His Phe Arg Gln Lys Val Asp His Gln Trp Ile Arg Leu
 850 855 860
 Ala Ser Ile Asp Glu Asn Asn Ser Trp Lys Asp Trp
 865 870 875

<210> 6606

<211> 101

<212> PRT

<213> S.epidermidis

<400> 6606

Gly Tyr Leu Phe Val Tyr Asn Arg Thr Gln Cys Gly Phe Val Lys Cys
 1 5 10 15
 Val Arg Lys Trp Thr Tyr Tyr Leu Leu Ser Leu Ile Ser Ser Asn Leu
 20 25 30
 Gly Ile Leu Ile Tyr Thr Gln Pro Gln Cys Gly Phe Ser Asn Arg Leu
 35 40 45
 Asn Asn Ser Ile Tyr Leu Leu Ser Ser Asn Val Ser Val Leu Ile Asn
 50 55 60
 Asn Thr Asn Ala Asp Ala Leu Ser Gln Cys Ile Arg Lys Arg Lys Tyr
 65 70 75 80
 Ser Phe Ser Lys Ile Lys Leu Asn Thr Ala Glu Met Ser Ala Leu Val
 85 90 95
 Asp Ile Ser Gln Arg
 100

<210> 6607

<211> 1529

<212> PRT

<213> S.epidermidis

<400> 6607

Ser Asn Leu Tyr Ile Glu Gln Ile Asn Lys Leu His Tyr Ser Asn Tyr
 1 5 10 15
 Tyr Gln Thr Lys Leu Ser Glu Asn Ser Asn Lys Gly Val Cys Ile Met
 20 25 30
 Tyr Asn Glu Lys Leu Lys Lys Gly Leu Tyr Asp Tyr Arg Glu Glu His
 35 40 45
 Asp Ala Cys Gly Ile Gly Phe Tyr Ala Asn Met Asp Asn Lys Arg Ser
 50 55 60
 His Asp Ile Ile Glu Lys Ser Leu Glu Met Leu Arg Arg Leu Asp His
 65 70 75 80
 Arg Gly Gly Val Gly Ala Asp Gly Ile Thr Gly Asp Gly Ala Gly Ile
 85 90 95
 Met Thr Glu Ile Pro Tyr Gln Leu Phe Glu Gln Leu Thr Glu Phe Lys
 100 105 110
 Val Pro Gly Glu Gly Tyr Tyr Ala Val Gly Leu Phe Phe Ser Lys Glu

1010	1015	1020
Val Lys Leu Val Ser Lys Thr Gly Val Gly Thr Ile Ala Ser Gly Val		
1025	1030	1035
Ala Lys Ala Phe Ala Asp Lys Ile Val Ile Ser Gly Tyr Asp Gly Gly		1040
	1045	1050
Thr Gly Ala Ser Pro Lys Thr Ser Ile Gln His Ala Gly Leu Pro Trp		1055
	1060	1065
Glu Ile Gly Leu Ala Glu Thr His Gln Thr Leu Lys Leu Asn Asp Leu		1070
	1075	1080
Arg Ser Arg Val Lys Leu Glu Thr Asp Gly Lys Leu Leu Thr Gly Lys		1085
	1090	1095
Asp Val Ala Tyr Ala Cys Ala Leu Gly Ala Glu Glu Phe Gly Phe Ala		1100
	1105	1110
Thr Ala Pro Leu Val Val Leu Gly Cys Ile Met Met Arg Val Cys His		1115
	1125	1130
Asn Asp Thr Cys Pro Val Gly Val Ala Thr Gln Asn Lys Asp Leu Arg		1135
	1140	1145
Ala Leu Phe Arg Gly Lys Ala Gln His Val Val Asn Phe Met Tyr Phe		1150
	1155	1160
Ile Ala Glu Glu Leu Arg Glu Ile Leu Ala Ser Leu Gly Leu Glu Thr		1165
	1170	1175
Val Glu Glu Leu Val Gly Arg Thr Asp Leu Leu Gln Arg Ser Thr Gln		1180
	1185	1190
Leu Lys Pro Asn Ser Lys Ala Ala Ser Leu Gln Ile Glu Arg Leu Ile		1195
	1205	1210
Glu Gln Phe Asp Gly Val Asn Thr Lys Glu Ile Ser Gln Asn His His		1215
	1220	1225
Leu Asp Glu Gly Phe Asp Leu Asn Tyr Leu Tyr Pro Asp Ala Arg Tyr		1230
	1235	1240
Ser Ile Glu Asn Gly His Ser Phe Thr Gly Asn Tyr Val Val Asn Asn		1245
	1250	1255
Glu Gln Arg Asp Val Gly Val Ile Thr Gly Ser Ala Ile Ala Lys Gln		1260
	1265	1270
Tyr Gly Glu Glu Gly Leu Pro Glu Asp Thr Ile Leu Ala Tyr Thr Glu		1275
	1285	1290
Gly His Ala Gly Gln Ser Leu Ala Ala Tyr Ala Pro Arg Gly Leu Thr		1295
	1300	1305
Ile His His Thr Gly Asp Ala Asn Asp Tyr Val Gly Lys Gly Leu Ser		1310
	1315	1320
Gly Gly Thr Val Ile Val Asn Ala Pro Asn Ser Gln Arg Glu Asn Glu		1325
	1330	1335
Ile Ile Ala Gly Asn Val Asn Phe Tyr Gly Ala Ser Arg Gly Lys Ala		1340
	1345	1350
Phe Ile Asn Gly Lys Ala Gly Glu Arg Phe Cys Ile Arg Asn Ser Gly		1355
	1365	1370
Ala Asp Val Val Val Glu Gly Ile Gly Asp His Gly Leu Glu Tyr Met		1375
	1380	1385
Thr Gly Gly His Val Ile Ile Leu Gly Asp Val Gly Lys Asn Phe Gly		1390
	1395	1400
Gln Gly Met Ser Gly Gly Val Ser Tyr Ile Phe Pro Ser Asp Val Glu		1405
	1410	1415
Lys Phe Lys Lys Val Asn Ala Leu Glu Thr Leu Glu Phe Ser Ser Ile		1420
	1425	1430
Arg Phe Asp Glu Glu Lys Ser Leu Ile Lys Asp Met Leu Glu Ala His		1435
	1445	1450
Phe Lys His Thr Arg Ser Asn Lys Ala Arg Gln Leu Leu Asp Gln Phe		1455

	1460		1465		1470
Asp	Asn	Ile	Glu	Lys	Leu
	1475		1480		1485
Leu	Met	Met	Gln	Lys	Ile
	1490		1495		1500
Asp	Glu	Ala	Thr	Leu	Ala
1505			1510		1515
Gln	Glu	Leu	Gln	Pro	Ala
	1525				

<210> 6608
 <211> 52
 <212> PRT
 <213> S.epidermidis

	1460		1465		1470
His	Pro	Asp	Leu	Asn	Asn
1			5		10
Asn	His	Arg	Gly	Ser	Pro
	20		25		30
Gln	Ile	Gly	Ala	Lys	Asn
	35		40		45
Thr	Asn	Val	Ser		
	50				

<210> 6609
 <211> 180
 <212> PRT
 <213> S.epidermidis

	1460		1465		1470
Asn	Gly	Gly	Tyr	Met	His
1			5		10
Tyr	Glu	Thr	Ser	Leu	Asn
	20		25		30
Glu	Ser	Ser	Trp	Gln	Asp
	35		40		45
Glu	Ser	Tyr	Asn	Tyr	Glu
	50		55		60
Glu	Val	Ile	Gly	His	Val
65			70		75
Asn	Lys	Lys	Ala	Ile	Ala
	85		90		95
Ser	Ile	Arg	Asn	Gln	Gly
	100		105		110
Glu	Arg	Ala	Lys	Glu	Gln
	115		120		125
Pro	Gln	Tyr	Phe	Glu	Lys
	130		135		140
Ile	His	Ile	Glu	Glu	Lys
145			150		155
Leu	Lys	Pro	Val	Gln	Asn
	165		170		175
Glu	Val	Leu	Asp		
	180				

<210> 6610
 <211> 503
 <212> PRT
 <213> S.epidermidis

<400> 6610

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Asp Gly Gly Tyr Ala Met Leu Ser Ser Glu Leu Ile Leu Phe Met Phe
1      5      10      15
Phe Ile Thr Leu Val Ile Ala Ile Leu Ser Gly Leu Ile Phe Leu Asn
20      25      30
His Arg Val Pro Ile Gln Tyr Ile Lys Phe His Ile Tyr Leu Leu Val
35      40      45
Leu Pro Ile Ile Thr Gly Leu Ser Gly Leu Ile Phe Phe Gly Glu Arg
50      55      60
Ala Asn Val Gly Pro Phe Val Val Asp His Leu Thr Trp Leu Met Met
65      70      75      80
Thr Phe Ile Leu Thr Leu Gly Phe Ile Ile Gln Lys Phe Ser Met Arg
85      90      95
Tyr Leu Ile Gly Asp Met His Tyr Arg Lys Tyr Phe Pro Phe Phe Thr
100     105     110
Leu Ile Thr Ala Phe Ala Ser Leu Ala Trp Leu Ser Gly Asp Leu Arg
115     120     125
Leu Met Thr Met Phe Trp Gly Ala Thr Leu Phe Val Leu Thr Arg Leu
130     135     140
Ile Lys Val Asn Lys Leu Trp Lys Val Pro Arg Glu Ala Ala Arg Ile
145     150     155     160
Ser Ala Trp Ser Phe Ile Leu Ala Trp Leu Ser Leu Leu Ile Ala Val
165     170     175
Ile Leu Leu Tyr Ile Ala Thr Gly Asp Trp Tyr Ile Tyr Ser Asn Met
180     185     190
Ser Asp Asp Asn Ala Ile Asn Tyr Gly Met Arg Leu Cys Ile Asn Leu
195     200     205
Leu Ile Val Leu Ala Val Ile Ile Pro Ala Ala Gln Phe Pro Phe Gln
210     215     220
Gly Trp Leu Ile Glu Ser Val Ala Ala Pro Thr Pro Val Ser Ala Ile
225     230     235     240
Met His Ala Gly Ile Val Asn Ala Gly Gly Val Ile Leu Thr Arg Phe
245     250     255
Ser Pro Val Phe Asn Asp Glu Ile Ala Ile Ser Leu Leu Leu Ile Ile
260     265     270
Ala Ser Ile Ser Val Leu Ser Gly Ser Gly Ile Thr Leu Val His Val
275     280     285
Asp Tyr Lys Arg Gln Leu Val Arg Ser Thr Ile Ser Gln Met Gly Phe
290     295     300
Met Leu Val Gln Cys Ala Leu Gly Ala Tyr Ser Ala Ala Ile Val His
305     310     315     320
Leu Ile Leu His Gly Val Phe Lys Ala Thr Leu Phe Leu Gln Ser Gly
325     330     335
Ser Val Val Lys Arg Phe Asn Ile Pro Thr Ser Pro Ser Val Lys Lys
340     345     350
Ser Tyr Gly Trp Leu Val Phe Gly Arg Leu Leu Ala Ile Leu Ile Ala
355     360     365
Ile Ile Phe Trp Leu Asn Ser Asp Arg His Ala Tyr Asp Val Leu Ser
370     375     380
Ala Leu Ile Leu Ala Trp Ser Leu Met Val Ser Trp Asn Gln Leu Val
385     390     395     400

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Ala Phe Ser His Gly Leu Ile Gly Arg Val Ile Gly Val Cys Met Ile
 405 410 415
 Ile Val Val Ala Ile Val Tyr Ile Ile Thr His His Tyr Phe Phe Thr
 420 425 430
 Thr Leu Ser Asn Val Asp Ile His Ile Val Ser Pro Pro Leu Ile Ser
 435 440 445
 Ile Ile Leu Ser Ile Ala Ile Ile Val Phe Gly Ser Met Leu Ser Ile
 450 455 460
 Trp Val Ser Arg Arg Arg Glu Ser Lys Ala Phe Ala Lys Leu Tyr Leu
 465 470 475 480
 Trp Leu Ile Lys Val Gly Glu Ala Lys Thr Gln Ser Ile Glu Ser His
 485 490 495
 Pro Ser Tyr Leu Lys Arg Phe
 500

<210> 6611

<211> 70

<212> PRT

<213> S.epidermidis

<400> 6611

Arg Asp Asn Leu Tyr Gly Tyr Leu Tyr Phe Leu Arg Ser Asn Lys Asn
 1 5 10 15
 Lys Leu His Thr Pro Ser Phe Pro Thr Ser Glu Val Gln Lys Gln Pro
 20 25 30
 Leu Lys Pro Met Pro Lys Gly Phe His Tyr Ser Met Leu Leu Phe Pro
 35 40 45
 Leu Asp Asp Met Tyr Phe Ser His Val Phe Ser Thr Ile Asp Ile Arg
 50 55 60
 Cys His Ile Arg Val Leu
 65 70

<210> 6612

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6612

Asn Ser Ile His Ser Val Leu Leu Gly Lys Ile Leu Leu Thr Tyr Leu
 1 5 10 15
 Val Phe Asn Val Gln Met Asn Val Asn Lys His Ser Lys Leu Asn Thr
 20 25 30
 Ile Cys His Val Ile Pro Ser Ser Ser
 35 40

<210> 6613

<211> 54

<212> PRT

<213> S.epidermidis

<400> 6613

Glu Lys Cys Leu Gln Arg Gln Leu Ile Ile Glu Lys Asp Leu Lys Leu
 1 5 10 15
 Asp Ile Ser Tyr Ser Ser Lys Ser Ile Thr Phe Lys Thr Phe Pro Ser
 20 25 30
 Phe Asn Tyr Gly Ile Phe Gly Asp His Phe Thr Pro Phe Thr Ala Thr

35
Val Arg Ser Thr Val Phe
50

40

45

<210> 6614
<211> 180
<212> PRT
<213> S.epidermidis

<400> 6614

Arg	Arg	Ile	His	Met	Lys	Lys	Leu	Leu	Cys	Thr	Leu	Phe	Ala	Ala	Ala
1				5					10					15	
Leu	Val	Leu	Ser	Ala	Cys	Gly	Gln	Asp	Thr	Lys	Glu	Asp	Glu	Asn	
			20					25				30			
Lys	Lys	Ser	Glu	Ile	Thr	Thr	Glu	Lys	Lys	Ser	Asp	Asp	Lys	Lys	Asp
		35					40				45				
Lys	Lys	Thr	Asn	Glu	Asp	Lys	Lys	Ser	Gly	Glu	Gln	Lys	Lys	Ser	Gln
	50					55					60				
Glu	Lys	Lys	Asn	Asn	Lys	Ser	Met	Gln	Glu	Ser	Ala	Thr	Asn	Glu	Gln
65				70					75					80	
Val	Gln	Ser	Gln	Gln	Gln	Thr	Gln	Gln	Ala	Asn	Gln	Gln	Ala	Gln	Gln
			85					90					95		
Ser	Asp	Asn	His	Glu	Pro	Thr	Lys	Glu	Glu	Ile	Tyr	Glu	Trp	Asp	Lys
		100					105					110			
Gln	Asn	Ile	Pro	Gly	Gly	Thr	Asp	Phe	Gly	Leu	Ile	Asp	Pro	Glu	Asp
	115					120					125				
Val	Asn	Glu	Ala	Ser	Glu	Ser	Gln	Asn	Glu	Glu	Pro	Asp	Glu	Trp	Ile
	130					135					140				
Lys	Gly	Gln	Glu	Glu	Trp	Asn	Asn	Ala	Thr	Gln	Ser	Glu	Lys	Glu	Glu
145				150						155				160	
Leu	Arg	Lys	Gln	Asn	Ala	Gln	Lys	Tyr	Gly	Tyr	Glu	Tyr	Asp	Pro	Lys
			165						170					175	
Asp	Tyr	Glu	Glu												
			180												

<210> 6615
<211> 162
<212> PRT
<213> S.epidermidis

<400> 6615

Leu	Ile	Gln	Gln	Leu	Lys	Gln	Ser	Ile	His	His	Leu	Lys	Gln	Leu	Asp
1				5					10					15	
Asp	Ala	Met	Ile	Gln	Leu	Ala	Gln	Gln	Leu	Asp	Tyr	Phe	Glu	Asn	Ile
		20						25				30			
His	Ser	Ile	Pro	Gly	Ile	Gly	Lys	Leu	Ser	Thr	Ala	Met	Ile	Ile	Gly
	35					40					45				
Glu	Ile	Gly	Asp	Ile	Lys	Arg	Phe	Lys	Ser	Asn	Lys	Gln	Leu	Asn	Ala
	50					55					60				
Phe	Val	Gly	Ile	Asp	Ile	Lys	Arg	Tyr	Gln	Ser	Gly	His	Thr	His	Cys
65				70					75					80	
Arg	Asp	Thr	Ile	Asn	Lys	Arg	Gly	Asn	Lys	Lys	Ala	Arg	Lys	Leu	Leu
			85					90						95	
Phe	Trp	Val	Ile	Met	Asn	Ile	Ile	Arg	Gly	Gln	His	His	Tyr	Asp	Asn
		100					105					110			
His	Val	Val	Asp	Tyr	Tyr	Tyr	Lys	Leu	Arg	Lys	Gln	Pro	Asn	Glu	Lys

115	120	125
Pro His Lys Thr Ala Ile Ile Ala Cys Ile Asn Arg Leu Leu Lys Thr		
130	135	140
Ile His Tyr Leu Val Met Asn His Lys Leu Tyr Asp Tyr Gln Met Ser		
145	150	155
Pro His		160

<210> 6616
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 6616
Ile Val Lys His Cys Asn Lys Leu Gln Leu Thr Leu Pro Met Glu Thr
1 5 10 15
Phe Ile Arg Ile Pro Gln Ile Asn Pro Pro Arg His Ile Asn Glu Met
20 25 30
Ile Glu Thr Ile His Asn Arg Asp Phe Asp Glu Phe Ser Ser Leu Lys
35 40 45
Arg Thr Ile
50

<210> 6617
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 6617
Val Thr Met His Val Leu Thr Val Pro Asn Gln Lys Ala Thr Ala Asn
1 5 10 15
Tyr Val Pro Ala Ala Ala Val Ile Arg Arg Trp Gln Ala Leu Ser Gly
20 25 30
Ile Ile Gly Arg Lys Ala Arg Val Gly Gly Phe Leu Ser Leu Met
35 40 45

<210> 6618
 <211> 576
 <212> PRT
 <213> S.epidermidis

<400> 6618
Val Ile Val Asn Gly Gly Ala Thr Val Asp Tyr Gln Ala Leu Tyr Arg
1 5 10 15
Met Tyr Arg Pro Gln Ser Phe Asp Asp Val Val Gly Gln Thr His Val
20 25 30
Thr Lys Thr Leu Arg Asn Ala Ile Ser Lys Gly Lys Gln Ser His Ala
35 40 45
Tyr Ile Phe Ser Gly Pro Arg Gly Thr Gly Lys Thr Ser Ile Ala Lys
50 55 60
Val Phe Ala Lys Ala Ile Asn Cys Leu Asn Ser Asp Asp Gly Glu Pro
65 70 75 80
Cys Asn Glu Cys Ala Ile Cys Lys Gly Ile Thr Gln Gly Thr Asn Asn
85 90 95
Asp Val Ile Glu Ile Asp Ala Ala Ser Asn Asn Gly Val Asp Glu Ile
100 105 110

Arg	Asn	Ile	Arg	Asp	Lys	Val	Lys	Tyr	Ala	Pro	Ser	Glu	Ser	Lys	Tyr
	115						120					125			
Lys	Val	Tyr	Ile	Ile	Asp	Glu	Val	His	Met	Leu	Thr	Thr	Gly	Ala	Phe
	130					135						140			
Asn	Ala	Leu	Leu	Lys	Thr	Leu	Glu	Glu	Pro	Pro	Ala	His	Ala	Ile	Phe
145					150						155				160
Ile	Leu	Ala	Thr	Thr	Glu	Pro	His	Lys	Ile	Pro	Pro	Thr	Ile	Ile	Ser
				165					170					175	
Arg	Ala	Gln	Arg	Phe	Asp	Phe	Lys	Ala	Ile	Ser	Ser	Asp	Gln	Ile	Ile
		180						185					190		
Asp	Arg	Leu	Lys	Tyr	Val	Ala	Asn	Ser	Gln	Ser	Leu	Asp	Tyr	Asp	Asp
	195						200					205			
Ala	Ala	Leu	Glu	Phe	Ile	Ala	Lys	Ala	Ser	Glu	Gly	Gly	Met	Arg	Asp
	210					215					220				
Ala	Leu	Ser	Ile	Met	Asp	Gln	Ala	Ile	Ala	Phe	Gly	Asp	Glu	Arg	Leu
225					230					235					240
Thr	Leu	Gln	Asp	Ala	Leu	Asn	Val	Thr	Gly	Ser	Val	Asp	Glu	Ala	Ala
				245					250					255	
Leu	Asn	Glu	Leu	Phe	Asn	Asp	Ile	Val	Lys	Ser	Asp	Val	Lys	Ala	Ala
			260					265					270		
Phe	Asn	Arg	Tyr	His	His	Phe	Ile	Ser	Glu	Gly	Lys	Glu	Val	Asn	Arg
	275						280					285			
Leu	Ile	Asn	Asp	Met	Ile	Tyr	Phe	Val	Arg	Asp	Thr	Ile	Met	Asn	Lys
	290					295					300				
Thr	Ser	Asn	Glu	Ser	Val	His	Phe	Glu	Ser	Leu	Ile	His	Phe	Asp	Leu
305					310					315					320
Asp	Met	Leu	Tyr	Arg	Met	Ile	Asp	Ile	Ile	Asn	Asp	Thr	Leu	Val	Ser
				325					330					335	
Ile	Arg	Phe	Ser	Val	Asn	Gln	Ser	Val	His	Phe	Glu	Val	Leu	Leu	Val
		340						345					350		
Lys	Leu	Ala	Glu	Met	Ile	Lys	Thr	Gln	Pro	Gln	Thr	Val	Gln	Asn	Val
	355						360						365		
Ala	Thr	Ala	Ser	Val	Ala	Asn	Glu	Pro	Asp	Asn	Glu	Met	Leu	Leu	Gln
	370				375						380				
Arg	Leu	Glu	Gln	Leu	Glu	Asn	Glu	Leu	Lys	Thr	Leu	Lys	Glu	Gln	Gly
385					390					395					400
Ile	Lys	Thr	Asn	Lys	Val	Ser	Gln	Gln	Pro	Lys	Lys	Pro	Thr	Arg	Thr
			405						410					415	
Ile	Gln	Arg	Ser	Lys	Asn	Thr	Phe	Ser	Met	Gln	Gln	Ile	Ala	Lys	Val
		420						425					430		
Leu	Asp	Lys	Ala	Asn	Lys	Asp	Asp	Ile	Lys	Leu	Leu	Lys	Asn	His	Trp
	435					440						445			
Gln	Glu	Val	Ile	Asp	His	Ala	Lys	Ser	Asn	Asp	Lys	Lys	Ser	Leu	Val
	450					455					460				
Ser	Leu	Leu	Leu	Asn	Ser	Glu	Pro	Val	Ala	Ala	Ser	Glu	Asp	His	Val
465					470					475					480
Leu	Val	Lys	Phe	Asp	Glu	Glu	Ile	His	Cys	Glu	Ile	Val	Asn	Lys	Asp
			485						490					495	
Asp	Glu	Lys	Arg	Asn	Asn	Ile	Glu	Ser	Val	Val	Cys	Asn	Ile	Val	Asn
		500						505					510		
Lys	Thr	Val	Lys	Val	Val	Gly	Val	Pro	Ala	Asp	Gln	Trp	Leu	Arg	Val
	515						520					525			
Arg	Ala	Glu	Tyr	Leu	Gln	Asn	Arg	Asn	Thr	Asn	Glu	Thr	His	Gln	Ser
	530					535					540				
Glu	Lys	Gln	Ser	Thr	Gln	Gln	Ser	Gln	Gln	Ile	Asp	Ile	Ala	Gln	Lys
545					550					555					560

Ala Lys Asp Leu Phe Gly Glu Glu Thr Val His Leu Val Asp Glu Asp
 565 570 575

<210> 6619
 <211> 93
 <212> PRT
 <213> S.epidermidis

<400> 6619
 Phe Met Thr Lys Gln Ala Asn Ala Ser Arg Leu Ser Arg Leu Phe Asn
 1 5 10 15
 Val Ala Gly Phe Ile Val Asp Gly Tyr Asn Gly Ile Arg Tyr Asn Ala
 20 25 30
 Lys Asn Lys Gln Leu Val Tyr Leu Ser Leu Gly Leu Ser Ala Leu Gly
 35 40 45
 Thr Ile Ile Asp Phe Tyr Ile Ser Ile Lys Ser Ala Ser Lys Leu Arg
 50 55 60
 Lys Leu Ser Ala Leu Gly Ser Phe Ala Ile Asn Gly Val Arg Leu Phe
 65 70 75 80
 Thr Ser Phe Lys Lys Val Arg Asp Glu Tyr Asp Tyr His
 85 90

<210> 6620
 <211> 46
 <212> PRT
 <213> S.epidermidis

<400> 6620
 Leu Ile Leu Leu Tyr Phe Lys Leu Lys Leu Leu Asp Lys Leu Tyr Lys
 1 5 10 15
 Leu Leu Ile Thr Tyr Asp Lys His Phe Tyr Glu Asn Tyr Lys Asn Phe
 20 25 30
 Asn Asn Tyr Ser Glu Phe Val Leu Tyr Asn Arg Val Cys Val
 35 40 45

<210> 6621
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 6621
 Asn Leu Asn Asn Phe Thr Ser Asp Tyr Thr Ser Lys Phe His Asn Leu
 1 5 10 15
 Asp Leu Tyr Tyr Leu Tyr Lys Asn Leu Lys Ser Lys Val Lys Asn
 20 25 30
 His Ala Pro Leu Tyr Arg Thr His Ile Ile Asn Val Thr Glu Val Asp
 35 40 45
 Ser

<210> 6622
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 6622

Lys Thr Tyr Asn Gln Phe Glu Ile Gln Thr Leu Phe Lys Ile Ser Ile
 1 5 10 15
 Phe Ile Phe Ile Ile Asp Tyr Val Tyr Met Arg Ile Arg Asn Glu Ser
 20 25 30
 Val Met Ile Gly Val Asn Lys Leu Thr His Arg
 35 40

<210> 6623

<211> 347

<212> PRT

<213> S.epidermidis

<400> 6623

Arg Tyr Asn Asn Asn Val Leu Arg Phe His Ile Glu Val Lys Val His
 1 5 10 15
 Met Lys Ser Ile Thr Gln Ala Ser Phe Met Lys Gly Ile Met Phe Thr
 20 25 30
 Phe Thr Ile Ala Ile Ile Ser Tyr Ile Leu Ala Lys Phe Pro Ile Leu
 35 40 45
 His Thr Ile Gly Ala Leu Ala Ile Ala Ile Ile Phe Ala Met Ile Tyr
 50 55 60
 Arg Gln Val Ile Gly Tyr Pro Glu His Ile Arg Pro Gly Ile Thr Phe
 65 70 75 80
 Ala Ser Lys Arg Leu Leu Lys Phe Ala Ile Ile Leu Tyr Gly Leu Lys
 85 90 95
 Leu Asn Met Gly Asp Ile Leu Gly Lys Gly Trp Lys Leu Leu Ile
 100 105 110
 Asp Ile Ile Val Ile Ile Phe Ser Ile Ser Leu Thr Leu Leu Asn
 115 120 125
 Gln Ile Ile Lys Gly Asn Lys Asp Ile Ser Ile Leu Leu Gly Ile Gly
 130 135 140
 Thr Gly Val Cys Gly Ala Ala Ala Ile Ala Ala Thr Ala Pro Ile Leu
 145 150 155 160
 Lys Ser Lys Glu Lys Asp Ile Ala Ile Ser Val Gly Ile Ile Ala Leu
 165 170 175
 Val Gly Thr Ile Phe Ala Leu Ile Tyr Thr Ala Ile Glu Ala Ile Phe
 180 185 190
 Asn Ile Pro Thr Ile Thr Tyr Gly Ala Trp Thr Gly Ile Ser Leu His
 195 200 205
 Glu Ile Ala Gln Val Val Leu Ala Ala Gly Ile Gly Gly Ser Glu Ala
 210 215 220
 Met Thr Phe Ala Leu Leu Gly Lys Leu Gly Arg Val Phe Leu Leu Ile
 225 230 235 240
 Pro Leu Ser Ile Val Leu Ile Leu Tyr Met Arg Tyr Lys Ser His Ser
 245 250 255
 Ser Gln Val Gln Gln Lys Ile Asp Ile Pro Tyr Phe Leu Ile Gly Phe
 260 265 270
 Ile Ile Met Ala Cys Ile Asn Thr Phe Val Pro Ile Pro Ser Leu Leu
 275 280 285
 Met Asn Ile Ile Asn Val Ile Thr Thr Leu Cys Met Leu Met Ala Met
 290 295 300
 Val Ala Leu Gly Leu Asn Ile Val Leu Lys Glu Val Ile Ser Lys Ala
 305 310 315 320
 Leu Lys Pro Phe Ile Val Ile Cys Ile Thr Ser Ile Cys Leu Ser Gly
 325 330 335
 Val Thr Leu Leu Val Thr Ser Ile Met Phe Lys

6623:6623=6623

340

345

<210> 6624
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 6624
 Arg Ser Leu Asn Gln Leu Lys Ile Asn Arg His Lys Lys Thr Thr Ile
 1 5 10 15
 Val Lys Asp Gly Gly Tyr Val Glu Cys Arg Leu Phe Phe Glu Phe Phe
 20 25 30
 Asn Asp Val Tyr Asp Ser Phe Asn Asp Phe Asp Asp Ser
 35 40 45

<210> 6625
 <211> 48
 <212> PRT
 <213> S.epidermidis

<400> 6625
 Arg Arg Leu Asn Phe Tyr Ala Cys Lys Glu Arg Pro Asn Tyr Ser Asn
 1 5 10 15
 Ile Val Leu Thr Val Leu Arg Gly Glu Val Thr Val Pro Cys Thr Arg
 20 25 30
 Asn Pro Leu Tyr Ala Arg Leu Asn Ser Phe Val Glu Asp Val Phe Leu
 35 40 45

<210> 6626
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6626
 Leu Tyr Leu Lys Gln Leu Gln Val Glu Arg Lys Cys Asn Asn Ile Tyr
 1 5 10 15
 Tyr Phe Lys Val Trp Asp Ile Ser Leu Tyr Ser Arg Leu Tyr Leu His
 20 25 30
 Leu Asn Arg Arg Arg Leu Asn Thr Leu Ile Tyr Glu Ser Ser Gln His
 35 40 45
 Arg Glu Phe His
 50

<210> 6627
 <211> 143
 <212> PRT
 <213> S.epidermidis

<400> 6627
 Lys Val Val Lys Lys Gly Val Thr Tyr Lys Met Lys Lys Phe Phe Ile
 1 5 10 15
 Phe Leu Leu Ser Ser Leu Leu Val Leu Ala Ala Cys Gly Lys Asn Tyr
 20 25 30
 Glu Ile Ser Asp Ile Thr Ser Lys Phe Lys Lys Glu Gly Leu Ser Val
 35 40 45
 Glu Asn Leu Arg Lys Met Asp Arg Glu Asp Phe Gly Met Ala Pro Met

50		55		60
Lys Thr Glu Asn Ala	Lys Ile Phe Thr Val	Ser Glu Asp Lys Asn Ala		
65	70	75	80	
Arg Ile Leu Lys Phe	Lys Asn Glu Asp Asp	Leu Lys Glu Met Lys Lys		
	85	90	95	
Tyr Tyr Glu Glu Leu Gly	Lys Ser Ser Ala Thr Phe Tyr	Ser His Val		
	100	105	110	
Tyr Thr Lys Asp Lys Phe	Leu Ile Gln Met Asn Gly	Asp Ile Asp Asp		
	115	120	125	
His Val Phe Glu Lys Tyr	Lys Lys Ala Met Asn	Glu Ala Leu Asn		
130	135	140		

<210> 6628

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6628

Val Thr Ala Lys Pro Ser Phe Thr Ile Glu Pro Cys Gly Ser Ile Tyr
1 5 10 15
Tyr Pro Val Leu Ala Pro Val Ser Arg Ser Tyr Pro Ser Leu Ile Gly
20 25 30
Arg Leu Ser Thr Cys Tyr Ser Pro Val Arg Arg
35 40

<210> 6629

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6629

Lys Ile Gln Lys Ile Val Tyr Ile Leu His Asn His His Leu Leu Arg
1 5 10 15
Trp Trp Phe Phe Tyr Val Tyr Leu Phe Ser Ala Gly Leu Asn Ser Phe
20 25 30
Lys His Pro Thr Phe Thr Ser Leu His Tyr Trp Ile Thr Phe Gln Asn
35 40 45
Lys Leu Leu
50

<210> 6630

<211> 60

<212> PRT

<213> S.epidermidis

<400> 6630

Tyr Tyr Gln Asn Phe Thr Ser Ile Glu Ile Glu Leu Arg Asn Met Met
1 5 10 15
Leu Ile Phe Lys Pro Tyr Leu Leu Ile Ile Asp Lys Phe Leu Asn Pro
20 25 30
Arg Ile His Cys Arg Arg Tyr Ile Phe Thr Val Ile Asp Ile Glu Pro
35 40 45
Phe His Val Ser Asn Phe Met Ile Gly Phe Asn Phe
50 55 60

<210> 6631

<400> 6636

Gly Leu Arg Phe Lys Ile Ser Tyr Ile Pro Leu Ala Ile Val Ile Glu
 1 5 10 15
 Thr Ser Ile Thr Ala Pro Ser Val Pro Ile Ser Thr Glu Ala Arg Lys
 20 25 30
 Thr Ser Leu Gly Gly Arg Val Arg Lys Val Ile Val Ser Tyr Phe Ile
 35 40 45
 Pro Phe Pro Pro Val Asn Leu Met Met Thr Ser Val Ile Pro Thr His
 50 55 60
 Lys Asn Val Pro Ile Ser Val Leu Thr Ile Val Ile Lys Val Arg Leu
 65 70 75 80
 Cys Gln Pro Val Thr Ser Ser Lys Val Lys Glu Val Glu Met Ile Ile
 85 90 95
 Ala Gln Val Ile Lys Lys Asn Lys Leu Ile Ala Pro Tyr
 100 105

<210> 6637

<211> 507

<212> PRT

<213> S.epidermidis

<400> 6637

Asn Lys Gly Glu Leu Ile Met Ile Tyr Thr Val Thr Thr Thr Leu Pro
 1 5 10 15
 Leu Ser His Gly Gly Arg Thr Gln Ala Leu Leu Arg Arg Ile Lys Leu
 20 25 30
 Leu Asp Glu Glu Phe Lys Ile Pro Ser Lys Ile Leu Thr Thr Asn Tyr
 35 40 45
 His Gly Asn Tyr Pro Ser Ile Tyr Lys Lys Tyr Arg Gln Glu Asn Lys
 50 55 60
 Val Thr Glu Asn Ile Gln Phe Glu Asn Met Tyr Glu Trp Leu Ser Asn
 65 70 75 80
 Phe Lys Leu Phe Lys Val Pro Lys Thr Leu Ile Thr Arg Asn Pro Lys
 85 90 95
 Tyr Ile Lys Thr Pro Arg Lys Ile Lys Gly Leu Ile Asp Lys Gln Gly
 100 105 110
 Lys Lys Ser Gly Leu Ile His Tyr Tyr Asn Asn Glu Cys His Val Arg
 115 120 125
 Ser Arg Lys Tyr Tyr Gly Gln Ser Asn Val Leu Glu Tyr Glu Asp Phe
 130 135 140
 Ile Ser Pro Thr Ser Gly Leu Lys Tyr Glu Arg His Gln Tyr Asn Leu
 145 150 155 160
 Tyr Gly Gln Leu His Arg Lys Glu Tyr Tyr Tyr Asp Asp Ser Ser Leu
 165 170 175
 Lys His Ser Asp Glu Leu Phe Asp Thr Glu Gly Ser Met Tyr Cys Lys
 180 185 190
 Arg Tyr Phe Lys Thr Lys Pro Asn Ser Lys Ile Asn Gly Val Glu Ile
 195 200 205
 Tyr Arg Asn Lys Lys Leu Tyr Lys Thr Phe Lys Asn Asp Lys Leu Leu
 210 215 220
 Ala Gln Phe Tyr Phe Gln Asn Arg Phe Lys Asn Gln Asp Ile Val Phe
 225 230 235 240
 Asn Asp Ala Arg Phe Leu Asp Lys Pro Leu Leu Lys Gln Thr His Gln
 245 250 255
 Thr Lys Asn Ile Leu Val Leu His Ser Ser His Leu Ser Gly Asp Gln

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 Gly Thr Thr Ala Leu Ser Ala Leu Ala Ser Thr His Ala Gln Ala Ala
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 Thr Thr His Thr Val Lys Ser Gly Glu Ser Val Trp Ser Ile Ser His
 35 40 45
 Lys Tyr Gly Ile Ser Ile Ala Lys Leu Lys Ser Leu Asn Gly Leu Thr
 50 55 60
 Ser Asn Leu Ile Phe Pro Asn Gln Val Leu Lys Val Ser Gly Ser Ser
 65 70 75 80
 Ser Arg Ala Thr Ser Thr Asn Ser Gly Thr Val Tyr Thr Val Lys Ala
 85 90 95
 Gly Asp Ser Leu Ser Ser Ile Ala Ala Lys Tyr Gly Thr Thr Tyr Gln
 100 105 110
 Lys Ile Met Gln Leu Asn Gly Leu Asn Asn Tyr Leu Ile Phe Pro Gly
 115 120 125
 Gln Lys Leu Lys Val Ser Gly Lys Ala Thr Ser Ser Ser Arg Ala Lys
 130 135 140
 Ala Ser Gly Ser Ser Gly Arg Thr Ala Ile Tyr Thr Val Lys Tyr Gly

Thr Gly Ala Pro Met Ala Ile Gly Ala Met Ala Ala Phe Ser Ser Ala
 210 215 220
 Phe Met Asn Ser Ala Leu Phe His Arg Leu Lys Leu Gly Asp Arg Lys
 225 230 235 240
 Ser Thr Ile Ser Val Gly Ile Glu Pro Leu Ser Gln Ala Asp Ile Val
 245 250 255
 Ser Ala Asn Pro Ile Pro Ile Tyr Val Thr Asn Phe Phe Gly Gly Ala
 260 265 270
 Ile Ala Gly Ile Ile Ile Ala Trp Ser Gly Met Ile Asn Asn Ala Thr
 275 280 285
 Gly Thr Ala Thr Pro Ile Ala Gly Phe Leu Val Met Phe Gly Phe Asn
 290 295 300
 Ser Leu Thr Lys Val Ile Ile Tyr Gly Val Val Met Ala Ile Ile Gly
 305 310 315 320
 Thr Ile Ala Gly Ile Val Gly Ser Ile Val Phe Lys Lys Tyr Pro Ile
 325 330 335
 Ile Thr Lys Lys Gln Met Leu Glu Arg Asp Thr Thr Thr
 340 345

<210> 6649

<211> 288

<212> PRT

<213> S.epidermidis

<400> 6649

Ile Phe Arg Gly Asn Ser Phe Met Lys Lys Ile Leu Ser Phe Leu Ile
 1 5 10 15
 Val Ala Ile Leu Val Leu Ser Ala Cys Gly Gly Asn Asn Gly Lys Lys
 20 25 30
 Val Thr Ile Gly Val Ala Ser Asn Asp Thr Lys Ala Trp Glu Lys Val
 35 40 45
 Lys Glu Leu Ala Lys Lys Asp Asp Ile Asp Leu Glu Ile Lys His Phe
 50 55 60
 Ser Asp Tyr Asn Val Pro Asn Lys Ala Leu Ser Asp Gly Asp Ile Asp
 65 70 75 80
 Leu Asn Ala Phe Gln His Phe Ala Phe Leu Asp Gln Tyr Lys Lys Ala
 85 90 95
 His Lys Asp Thr Asn Ile Glu Ala Leu Ser Thr Thr Val Leu Ala Pro
 100 105 110
 Leu Gly Ile Tyr Ser Asp Lys Val Lys Asn Ile Lys Asp Val Lys Lys
 115 120 125
 Gly Ala Gln Val Ala Ile Pro Asn Asp Val Ser Asn Gln Ala Arg Ala
 130 135 140
 Leu Lys Leu Leu Glu Ser Ala Gly Leu Ile Lys Leu Lys Lys Asn Phe
 145 150 155 160
 Gly Leu Asn Gly Thr Lys Asp Ile Glu Ser Asn Pro Lys Asp Leu
 165 170 175
 Lys Ile Lys Ala Val Asp Ala Gln Gln Thr Ala Arg Ala Leu Ser Asp
 180 185 190
 Val Asp Ile Ser Val Ile Asn Asn Gly Val Ala Thr Lys Ala Gly Lys
 195 200 205
 Asp Ala Lys Lys Asp Pro Ile Tyr Leu Glu Lys Ala Ser Ser Asp Ala
 210 215 220
 Val Lys Pro Tyr Ile Asn Val Val Ala Val Asn Ser Lys Asp Lys Asp
 225 230 235 240
 Asn Lys Thr Tyr Lys Lys Ile Ile Glu Leu Tyr His Ser Lys Glu Ala

6649-6999

			245						250					255			
Gln	Lys	Ala	Leu	Lys	Glu	Asp	Thr	Lys	Asp	Gly	Glu	Lys	Pro	Val	Asp		
			260						265					270			
Leu	Ser	Lys	Lys	Glu	Ile	Glu	Glu	Ile	Glu	Asn	Glu	Leu	Ala	Lys	Lys		
			275					280					285				

<210> 6650
 <211> 208
 <212> PRT
 <213> S.epidermidis

<400> 6650

Gly	Val	Ile	Met	Ile	Gln	Thr	Ile	Val	Thr	Ala	Ala	Ile	Leu	Tyr	Ile		
1				5					10					15			
Ala	Thr	Ala	Val	Asp	Leu	Leu	Val	Ile	Leu	Leu	Ile	Phe	Phe	Ala	Lys		
			20					25					30				
Ala	Lys	Thr	Lys	Lys	Glu	Tyr	Arg	Asp	Ile	Tyr	Ile	Gly	Gln	Tyr	Val		
			35				40					45					
Gly	Ser	Val	Thr	Leu	Ile	Val	Val	Ser	Leu	Phe	Phe	Ala	Phe	Val	Leu		
	50					55					60						
Asn	Tyr	Val	Pro	Glu	Lys	Trp	Ile	Leu	Gly	Leu	Leu	Gly	Leu	Ile	Pro		
65					70				75					80			
Ile	Tyr	Leu	Gly	Ile	Lys	Val	Ala	Ile	Tyr	Asp	Asp	Cys	Glu	Gly	Glu		
				85				90					95				
Lys	Arg	Ala	Lys	Lys	Glu	Leu	Asn	Glu	Lys	Gly	Leu	Ser	Lys	Leu	Val		
			100					105					110				
Gly	Thr	Val	Ala	Ile	Val	Thr	Ile	Ala	Ser	Cys	Gly	Ala	Asp	Asn	Ile		
		115					120					125					
Gly	Leu	Phe	Val	Pro	Tyr	Phe	Val	Thr	Leu	Ser	Val	Thr	Asn	Leu	Phe		
			130				135				140						
Ile	Thr	Leu	Phe	Val	Phe	Leu	Ile	Leu	Ile	Phe	Phe	Leu	Val	Phe	Thr		
145					150					155					160		
Ala	Gln	Lys	Leu	Ala	Asn	Ile	Pro	Gly	Val	Gly	Glu	Ile	Val	Glu	Lys		
				165					170					175			
Phe	Ser	Arg	Trp	Ile	Met	Ala	Val	Ile	Tyr	Ile	Ala	Leu	Gly	Leu	Phe		
			180					185					190				
Ile	Ile	Ile	Glu	Asn	Asp	Thr	Ile	Gln	Thr	Ile	Leu	Gly	Phe	Ile	Phe		
			195				200					205					

<210> 6651
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6651

Val	Lys	Ile	Met	Ile	Thr	Glu	Ile	Ile	Thr	Ser	Ile	Phe	Asn	Ser	Ile		
1				5					10					15			
Leu	Lys	Gln	Glu	Glu	Ile	Tyr	Leu	Asn	Asn	Asn	Ile	Glu	Gln	Leu	Ser		
			20					25					30				
Glu	Phe	Arg	Lys	Asp	Ile	Ile	Leu	Lys									
			35				40										

<210> 6652
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 6652

Tyr Tyr Val Ile Ile Asn Lys Leu Leu His Asp Leu Thr Lys Leu His
 1 5 10 15
 Leu Ile Glu Asn Met Thr Ile Asn His Thr Tyr Phe Asn Leu Gln Asn
 20 25 30
 Lys Tyr Gly Ile Arg Arg Glu Ser
 35 40

<210> 6653

<211> 224

<212> PRT

<213> S.epidermidis

<400> 6653

Gly Gly Tyr Ile Asn Met Phe Gly Ser Ser Leu Asp Ser Ser Gln Leu
 1 5 10 15
 Leu Gln Ala Leu Tyr Glu Thr Leu Tyr Met Val Thr Val Ser Leu Val
 20 25 30
 Ile Gly Ala Leu Ile Gly Ile Pro Leu Gly Ile Leu Leu Val Val Thr
 35 40 45
 Arg Lys Asn Gly Ile Trp Ser Asn Thr Ile Leu His Gln Val Leu Asn
 50 55 60
 Pro Ile Ile Asn Ile Leu Arg Ser Ile Pro Phe Ile Ile Leu Leu Ile
 65 70 75 80
 Ala Ile Val Pro Phe Thr Lys Leu Leu Val Gly Thr Ser Ile Gly Thr
 85 90 95
 Thr Ala Ala Ile Val Pro Leu Thr Val Tyr Val Ala Pro Tyr Ile Ala
 100 105 110
 Arg Leu Val Glu Asn Ser Leu Leu Glu Val Asp Asp Gly Ile Ile Glu
 115 120 125
 Ala Ala Lys Ala Met Gly Ala Ser Pro Leu Gln Ile Ile Arg Tyr Phe
 130 135 140
 Leu Leu Pro Glu Ala Leu Gly Ser Leu Ile Leu Ala Ile Thr Thr Ala
 145 150 155 160
 Ile Ile Gly Leu Ile Gly Ser Thr Ala Met Ala Gly Ala Val Gly Gly
 165 170 175
 Gly Gly Ile Gly Asp Leu Ala Leu Val Tyr Gly Tyr Gln Arg Phe Asp
 180 185 190
 Thr Ile Val Ile Val Ile Thr Val Ile Val Leu Ile Ile Ile Val Gln
 195 200 205
 Ile Ile Gln Thr Leu Gly Asn Phe Ile Ala Arg Val Ile Arg Arg Asn
 210 215 220

<210> 6654

<211> 233

<212> PRT

<213> S.epidermidis

<400> 6654

Val Asn His Ile Lys Glu Ile Gly Val Asp Met Asn Phe Lys Tyr Met
 1 5 10 15
 Asn Ile Ala Lys Gly Ile Ile Pro Ile Leu Ile Ser Met Ile Ile Leu
 20 25 30
 Leu Ser Phe Ile Ser Thr His Val Leu Ala Gln Asn Gln Trp Leu Arg
 35 40 45

Met Val Asp Leu Ser Val Gln Glu Trp Phe Ser Asn Gln Phe Gly Asp
50 55 60
Pro Asn Arg Val Phe Gly His Gly Phe Ile Asn Asn Ile Met Thr Phe
65 70 75 80
Cys Ala Thr Phe Gly Asp Val Lys Thr Ile Leu Ile Val Ala Thr Ile
85 90 95
Ile Ala Val Leu Leu Met Phe Tyr Lys Lys Val Pro Gln Ala Ile Trp
100 105 110
Leu Ile Ile Thr Met Thr Ser Gly Ala Leu Ile Asn Tyr Leu Ile Lys
115 120 125
Gln Thr Ile Glu Arg Ser Arg Pro Glu Asn His Leu Ile Val Asp Thr
130 135 140
Gly Trp Ser Phe Pro Ser Gly His Ser Asn Ile Asn Thr Leu Phe Phe
145 150 155 160
Leu Met Ile Met Ile Ile Ile Ile Pro Leu Ile Arg Gln Arg Ala Phe
165 170 175
Lys Phe Ile Ile Thr Ile Leu Ser Ile Val Phe Trp Ile Ser Val Leu
180 185 190
Ile Ser Arg Leu Tyr Phe His Ala His Tyr Phe Ser Asp Val Val Gly
195 200 205
Gly Val Ser Leu Ala Ile Ile Trp Val Ser Leu Phe Ile Leu Val Ser
210 215 220
Pro Leu Leu Asn Phe Trp Gly Glu Lys
225 230

<210> 6655

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6655

Phe Lys Asn Ile Asn Pro Leu Ser Ile Ala Met Thr Ser Val Ile Lys
1 5 10 15
Asn Ile Asn Lys Ile Asn Ser Glu Leu Asn Ile Ala Tyr Pro Pro Ser
20 25 30
Gln Lys Ile Ser Lys Thr Ile Ile Lys Ser Leu Gln
35 40

<210> 6656

<211> 490

<212> PRT

<213> S.epidermidis

<400> 6656

Gly Ile Ile Met Gly Glu Phe Lys Gly Phe Met Lys Tyr Asp Lys Gln
1 5 10 15
Ser Leu Ser Glu Leu Ser Leu Val Asp Arg Leu Ser Asn His Glu Ala
20 25 30
Phe Gln Gln Arg Phe Thr Lys Glu Asp Ala Ser Ile Gln Gly Ala Arg
35 40 45
Cys Met Asp Cys Gly Thr Pro Phe Cys Gln Thr Gly Gln Ser Tyr Gly
50 55 60
Arg Glu Thr Ile Gly Cys Pro Ile Gly Asn Tyr Ile Pro Glu Trp Asn
65 70 75 80
Asp Leu Val Tyr His Gln Asp Phe Lys Ala Ala Tyr Glu Arg Leu Arg
85 90 95

Glu	Thr	Asn	Asn	Phe	Pro	Glu	Phe	Thr	Gly	Arg	Val	Cys	Pro	Ala	Pro
			100					105					110		
Cys	Glu	Gln	Ser	Cys	Val	Met	Lys	Ile	Asn	Arg	Glu	Ser	Val	Ala	Ile
		115					120					125			
Lys	Gly	Ile	Glu	Arg	Thr	Ile	Ile	Asp	Glu	Ala	Tyr	Glu	Asn	Glu	Trp
	130					135					140				
Val	His	Pro	Ala	Tyr	Pro	Glu	Asp	His	Lys	Asp	Gln	Arg	Val	Ala	Ile
145					150					155					160
Val	Gly	Ser	Gly	Pro	Ala	Gly	Leu	Thr	Ala	Ala	Glu	Glu	Leu	Asn	Phe
			165						170					175	
Lys	Gly	Tyr	Lys	Val	Thr	Val	Tyr	Glu	Lys	Ala	His	Glu	Pro	Gly	Gly
			180					185					190		
Leu	Leu	Met	Tyr	Gly	Ile	Pro	Asn	Met	Lys	Leu	Asp	Lys	Asp	Val	Ile
		195					200					205			
Arg	Arg	Arg	Val	Ser	Leu	Met	Lys	Asp	Ala	Gly	Val	Leu	Phe	Lys	Thr
	210					215					220				
Gly	Val	Glu	Ile	Gly	Val	Asp	Val	Ser	Arg	Glu	Thr	Leu	Glu	Glu	Asn
225					230					235					240
Tyr	Asp	Ala	Ile	Ile	Leu	Cys	Thr	Gly	Ala	Gln	Asn	Ala	Arg	Asp	Leu
			245						250					255	
Pro	Leu	Glu	Gly	Arg	Met	Gly	Ser	Gly	Ile	His	Phe	Ala	Met	Asp	Tyr
			260					265					270		
Leu	Thr	Glu	Gln	Thr	Gln	Tyr	Leu	Asn	Gly	Glu	Ile	Glu	Ser	Leu	Ser
		275					280					285			
Ile	Thr	Ala	Lys	Asp	Lys	Asn	Val	Ile	Ile	Ile	Gly	Ala	Gly	Asp	Thr
	290					295					300				
Gly	Ala	Asp	Cys	Val	Ala	Thr	Ala	Leu	Arg	Glu	Asn	Cys	Lys	Ser	Ile
305				310						315					320
Val	Gln	Phe	Asn	Lys	Tyr	Thr	Lys	Gln	Pro	Glu	Glu	Ile	Thr	Phe	Glu
			325						330					335	
Ser	Asn	Thr	Ser	Trp	Pro	Leu	Ala	Met	Pro	Val	Phe	Lys	Met	Asp	Tyr
			340					345					350		
Ala	His	Lys	Glu	Tyr	Glu	Ala	Lys	Phe	Gly	Gln	Glu	Pro	Arg	Ala	Tyr
		355					360						365		
Gly	Val	Gln	Thr	Met	Arg	Tyr	Asp	Val	Asp	Glu	Leu	Gly	Asn	Val	Lys
	370					375					380				
Gly	Leu	Tyr	Thr	Gln	Ile	Leu	Lys	Glu	Thr	Pro	Asp	Gly	Met	Val	Met
385					390					395					400
Glu	Asp	Gly	Pro	Glu	Arg	Phe	Trp	Pro	Ala	Asp	Leu	Val	Leu	Leu	Ser
			405						410					415	
Ile	Gly	Phe	Val	Gly	Thr	Glu	Thr	Thr	Val	Pro	His	Ala	Phe	Asp	Ile
			420					425					430		
His	Thr	Glu	Arg	Asn	Lys	Ile	Val	Ala	Asn	Asp	Thr	Asn	Tyr	Gln	Thr
		435					440					445			
Asn	His	Ala	Lys												

<210> 6657

<211> 46

<212> PRT

<400> 6657

Arg Gln Ile Ile Met Pro Leu Met Ile Trp Ala Thr His Val Leu Gln
 1 5 10 15
 Trp Thr Ile Gln Arg Val Ala Lys Pro Arg Gly Gln Ala Asn Pro Ile
 20 25 30
 Lys Leu Phe Ser Val Arg Ile Val Val Cys Asn Ser Thr Ile
 35 40 45

<210> 6658

<211> 83

<212> PRT

<213> S.epidermidis

<400> 6658

His Ile Val Ile Gln Phe Ser Met Phe Ile Phe Leu Pro Thr Arg Ile
 1 5 10 15
 Asn Tyr Thr Leu His Gly Cys Leu Ser Gln Gln Leu Phe Glu Ile Asn
 20 25 30
 Phe Ser Arg Leu Phe Asn Asp Ser Leu Ser Cys Phe Ala Gln Gln Ile
 35 40 45
 Asn Thr Ile Gln Thr Tyr Ser Arg Phe Asn Asn Ser Lys Asn Tyr Thr
 50 55 60
 Ile Lys Asn Asn Ser Asn Tyr Ser Gly Gly Lys Thr Glu Leu Phe Leu
 65 70 75 80
 Tyr Glu Ile

<210> 6659

<211> 87

<212> PRT

<213> S.epidermidis

<400> 6659

Thr Tyr Asn Met Ser Pro Tyr Leu Asn Ile Ile Asp Val Thr Lys Arg
 1 5 10 15
 Val Thr Pro Asp Arg Gln Ile Glu Val Ile Gln Ile Thr Met Asn Gly
 20 25 30
 Leu Ser Ala Phe Glu Ile Thr Ser Phe Lys Thr Ile Phe Asn Pro Arg
 35 40 45
 Ala Thr Ile Ala Ile Asn Ile His Asn Val Val Ile Thr Phe Ile Ile
 50 55 60
 Phe Ile Ser Asn Glu Gly Ile Gly Thr Asn Val Leu Ile Gln Ala Ile
 65 70 75 80
 Ile Ile Asn Pro Ile Arg Lys
 85

<210> 6660

<211> 56

<212> PRT

<213> S.epidermidis

<400> 6660

Thr Arg Gly Met Arg Asn Ser Pro Asn Lys His Gly Glu Thr Lys Tyr
 1 5 10 15
 Arg Tyr Tyr Glu Lys Tyr Lys Asp Ser Leu Thr Asn Asn Trp Arg Arg
 20 25 30

Val Ser Met Val Phe Arg Asn Asp Lys Gln Leu Gln Lys Val Ala Gln
 35 40 45
 Lys Arg Leu Asn Lys Met Ser Val
 50 55

<210> 6661
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 6661
 Ser Phe Leu Ile Lys Leu Met Glu Phe Val Leu Ser Asn Arg Met Gln
 1 5 10 15
 Ser Leu Phe Leu Val Gln Met Thr Thr Met Ser Ile Thr Glu Leu Asn
 20 25 30
 Pro Leu Ser Leu Phe Met Leu Ala Leu Ile Leu Thr Tyr Gln Ile
 35 40 45

<210> 6662
 <211> 161
 <212> PRT
 <213> S.epidermidis

<400> 6662
 Asn Val Leu Ile Asp Gly Lys Phe Ile Asn Leu Tyr Gln Ser Asn Ile
 1 5 10 15
 Glu Lys Val Asn Asp Asn Arg His Ser Asn Glu Thr Ser Ile His Asn
 20 25 30
 Asp Asp Tyr Lys Lys Ile Leu Asn Lys Val Leu Lys Ser Asp Ile Ile
 35 40 45
 Ile Phe Ser Thr Pro Leu Tyr Trp Tyr Ser Met Ser Ala Ser Leu Lys
 50 55 60
 Leu Phe Ile Asp Arg Trp Thr Glu Ser Leu Arg Asp Thr Gln Ile Asp
 65 70 75 80
 Asn Phe Lys Glu Ile Met Ser Gln Lys Lys Tyr Leu Ile Leu Ile Ile
 85 90 95
 Gly Gly Asp Ser Pro Arg Ile Lys Ala Gln Pro Leu Val His Gln Phe
 100 105 110
 Lys Leu Ile Phe Glu Phe Met Asn Ile Thr His Phe Arg Phe Leu Ile
 115 120 125
 Gly Glu Gly Asn Lys Pro Phe Asp Val Leu Asn Asp Ser Gln Phe Met
 130 135 140
 Glu Glu Leu Ala Asn Thr Asn Leu Ala Leu Lys Lys Gly Asp Ile Tyr
 145 150 155 160
 Asp

<210> 6663
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 6663
 Gly Val Val Phe Val Leu Leu Lys Leu Glu Lys Thr Val Cys Glu Val
 1 5 10 15
 Cys Phe Tyr Leu Asn Ala Lys Asn Arg Asp Asn His Ile Asp Tyr Leu

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<210> 6664
<211> 373
<212> PRT
<213> S.epidermidis
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Gly 1	Phe	Lys	Met	Gln 5	Ser	Lys	Asn	Phe	Phe 10	Lys	Thr	Pro	Phe	Thr 15	Trp
Met	Met	Ile	Ile	Phe 20	Ser	Cys	Leu	Phe 25	Leu	Gly	Thr	Leu	Ile 30	Phe	Thr
Phe	Phe	Asn 35	Asp	Arg	Phe	Tyr	Asn 40	Met	Pro	Ile	Gly	Gln 45	Ile	Thr	Gln
Ile	Thr 50	Asp	Ile	Gln	Ser	Gln 55	Lys	Val	Thr	Asp	Glu 60	His	Lys	Asn	Lys
Asp 65	Ile	Lys	Tyr	Lys 70	Glu	Lys	Ile	Thr	Phe 75	Lys	Ile	Leu	Asn	Gly 80	Glu
Phe	Lys	Gly	Gln 85	Thr	Thr	Thr	Ile	Pro	His 90	Gln	Tyr	Val	Lys	Ser 95	Gln
Ala	Asp	Ser 100	Glu	Ser	Phe	Ser	Lys 105	Asn	Asp	Lys	Val	Leu	Leu 110	His	Ile
Ser	Lys 115	Asn	Pro	Lys	Asp	Ala	Thr 120	Ile	Ile	Glu	Lys	Lys 125	Arg	Asp	Thr
Ile	Val 130	Val	Ile	Ile	Thr	Gly 135	Leu	Phe	Leu	Leu	Thr 140	Val	Leu	Val	Val
Gly 145	Lys	Lys	Val	Gly 150	Leu	Gln	Ser	Ile	Leu	Ser 155	Leu	Ile	Val	Asn 160	Thr
Ile	Ala	Val	Met 165	Gly	Ala	Ile	Leu	Ile	His 170	Asp	Gln	Tyr	Gly	Ala 175	Ile
Ser	Leu	Phe 180	Phe	Leu	Met	Thr	Cys	Ala 185	Ile	Ile	Ile	Ser	Thr 190	Ser	Phe
Thr	Leu 195	Leu	Leu	Val	Thr	Gly	Trp 200	His	Ser	Arg	Thr	Leu 205	Ile	Thr	Ile
Val	Ser 210	Thr	Leu	Ile	Gly	Thr 215	Phe	Leu	Cys	Val	Gly 220	Ile	Thr	Glu	Val
Ile 225	Ile	Lys	Phe	Thr 230	Gly	Asn	Gly	Ile	Lys 235	Tyr	Glu	Thr	Ile	Thr 240	
Phe	Leu	Thr	Leu 245	Pro	Pro	Lys	Asp	Val 250	Phe	Leu	Ala	Ser	Val 255	Leu	Ile
Gly	Thr	Leu	Gly 260	Ala	Val	Met	Asp 265	Val	Ser	Ile	Thr	Ile	Ala 270	Ser	Gly
Met	Tyr 275	Glu	Ile	Leu	Lys	Arg	Ser 280	Pro	Gln	Ile	Ser	Met 285	Lys	Arg	Trp
Ala	Leu 290	Ala	Gly	Arg	His	Ile 295	Gly	Gln	Asp	Ile	Met 300	Gly	Thr	Met	Thr
Asn 305	Ile	Leu	Leu	Phe 310	Ser	Tyr	Leu	Ser	Gly 315	Ser	Leu	Pro	Met	Phe 320	Leu
Ile	Tyr	Leu	Lys 325	Asn	Ala	Asn	Thr	Ile	Thr 330	Tyr	Thr	Ile	Ser	Met 335	Asn
Trp	Ser	Leu	Glu 340	Val	Ala	Arg	Ala 345	Leu	Thr	Gly	Gly	Ile	Gly 350	Ile	Val
Leu	Thr 355	Ile	Pro	Ile	Thr	Ile 360	Ala	Leu	Met	Glu	Leu	Trp 365	Phe	Lys	Leu

Arg Gly Val Asn Gln
370

<210> 6665
<211> 88
<212> PRT
<213> S.epidermidis

<400> 6665
Tyr Phe Arg Ile Gln Tyr Leu Ser Gly Gln Ala Ser Leu Asn Ser Glu
1 5 10 15
Ala Leu Ala Tyr Phe Ile Phe His Val Lys Gln His Ser Ile Phe Ile
20 25 30
His Ile Thr Phe Ser Phe Lys Val Leu Asn Gln Thr Ile Thr Phe Val
35 40 45
Asp His Lys Ser Ile Gly Thr Asp Tyr Leu Val Ile Ala Asn Leu His
50 55 60
Gln Ser His Tyr Tyr Glu Leu Ser Met His Leu Ile Pro Gly Lys Phe
65 70 75 80
Phe Leu Asp Leu Asn Pro Tyr Gln
85

<210> 6666
<211> 62
<212> PRT
<213> S.epidermidis

<400> 6666
Ile Asn Phe Val Ile Tyr Pro Leu Leu Cys Gly Leu Phe Cys Ala Leu
1 5 10 15
Leu Glu Val Ile Asp Leu Trp Tyr Ala Lys Lys Ile Thr Lys Thr His
20 25 30
Ser Lys Asp Trp Arg Phe Asn Pro His Leu Ile Trp Met Met Phe Ile
35 40 45
Phe Ser Ala Val Met Gly Ile Ile Tyr Val Leu Leu Phe Lys
50 55 60

<210> 6667
<211> 50
<212> PRT
<213> S.epidermidis

<400> 6667
Leu Ser Asn Val Val Leu Pro Asp Pro Lys Tyr Pro Leu Asn Thr Val
1 5 10 15
Thr Gly Ile Phe Ala Ile Ser Arg Thr Leu Ser Phe Val Asn Ser Asn
20 25 30
Tyr Tyr Val Leu His Ser Ile Glu Ser Ser Phe Phe Tyr Gln Tyr Ser
35 40 45
Ile Phe
50

<210> 6668
<211> 40
<212> PRT
<213> S.epidermidis

66667:66668

<400> 6668

Lys Ile Asn Val Ser Val Ile Tyr Lys His Lys Ser Arg Cys Leu Thr
 1 5 10 15
 Phe Thr Ile Ile Val Phe Leu Lys Ile Met Asn Val Ser Thr Glu Met
 20 25 30
 Tyr Tyr Ser Lys Leu Ser Ile Leu
 35 40

<210> 6669

<211> 62

<212> PRT

<213> S.epidermidis

<400> 6669

Asn Tyr Phe Val Leu Gln Arg Phe Phe Trp Lys Leu Arg Lys Lys Val
 1 5 10 15
 Ser Tyr Gln Pro Pro Thr Lys Gln Ala Trp Trp Val Gly Pro Ser Pro
 20 25 30
 Arg Phe Gly Leu Ala Ala Ile Lys Gly Asn Gly Phe Phe Phe Phe Phe
 35 40 45
 Leu Arg Val Ile Arg Cys Phe Ser Ser Pro Gly Phe Ala Phe
 50 55 60

<210> 6670

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6670

Val His Ser Phe His Ser Ser Asp Leu Gly Ser Asp Asn Ile Pro His
 1 5 10 15
 Ile Lys Ile Phe Ile Leu Ser Cys Val Ala Lys Leu Thr Thr His Ile
 20 25 30
 Tyr Lys Leu Asp Asn Arg Tyr Phe Gly Phe Pro Lys
 35 40

<210> 6671

<211> 57

<212> PRT

<213> S.epidermidis

<400> 6671

Leu Glu Val Val Ala Ser Thr His Ser Asp Leu Leu Ala Ser Ile Ile
 1 5 10 15
 Leu Ile Ile Ile Leu Leu Gly Val Val Lys Met Ser Asp Ser Lys Thr
 20 25 30
 Leu Arg Gln Ile Cys Thr Pro Ile Leu Gln Asn Ser Ile Ser Asp Cys
 35 40 45
 Phe Glu Cys Ile Ala Ser Ala Phe Ser
 50 55

<210> 6672

<211> 43

<212> PRT

<213> S.epidermidis

6668 6669 6670 6671

<400> 6672

Asp Leu Pro Val Leu Met Lys Ile Ile Val Gly Lys Thr Gly Arg Lys
 1 5 10 15
 Tyr Ser Val Arg Leu Thr Ile Lys Asp Ser Leu Glu Glu Ile Lys Phe
 20 25 30
 Phe Asp Tyr Phe Ser Leu Met Leu Asn Tyr Lys
 35 40

<210> 6673

<211> 307

<212> PRT

<213> S.epidermidis

<400> 6673

Asn Lys Thr Val Phe Ile Leu Leu Asn Gly Gly Lys Ser Thr Met Asp
 1 5 10 15
 Ile Lys Gln Leu Arg Tyr Phe Val Glu Val Ala Arg Arg Glu His Ile
 20 25 30
 Ser Asp Ala Ala Leu Glu Leu Asn Ile Ala Gln Ser Ala Ile Ser Arg
 35 40 45
 Gln Ile Thr Gln Leu Glu Lys Glu Leu Gly Val Thr Leu Phe Lys Arg
 50 55 60
 Ser Gly Arg Asn Ile Ile Leu Thr Val Glu Gly Arg Gln Leu Leu Ser
 65 70 75 80
 Gln Ala Thr Gln Ile Leu Glu Leu Met Asp Lys Thr Ile His Ser Phe
 85 90 95
 Gln Gln His Val Ser His Asn Gln Gln Thr Ile Tyr Ile Gly Tyr Glu
 100 105 110
 Glu Ser Asp Ala Ser Gln Met Ile Leu Pro Leu Ile Gln Thr Phe Glu
 115 120 125
 Gln Gln Ser Asn Ser Thr Met Ile Pro Gln Leu Thr Lys His Asp Lys
 130 135 140
 Leu Leu Asp Gln Ile Leu Ser Asn Gln Leu Asp Leu Ala Ile Thr Glu
 145 150 155 160
 Phe Thr Pro Val Leu Glu Arg Glu Thr His Leu Arg Val Met Pro Leu
 165 170 175
 Phe Glu Glu Asn Tyr Tyr Met Tyr Val Pro Lys Ser His Pro Leu Ala
 180 185 190
 Met Thr Val His Pro Pro Leu Ser Gln Phe Thr Asn Gln Ser Leu Tyr
 195 200 205
 Cys Leu Glu Pro Met Thr Ser Ser Ile Lys Ser Lys Leu Ile Glu Lys
 210 215 220
 Thr Lys Ala Gln Val Arg Met Ile Ser Asp Met Lys Leu Ala Gln His
 225 230 235 240
 Ile Leu Ser His Asn Lys Gly Phe Ile Ile Ser Ser Gln Asn Ser Leu
 245 250 255
 Leu Tyr Asp His Val Asn Trp Thr Lys Ile Pro Leu Asn His Thr Glu
 260 265 270
 Leu Lys Arg Met Leu Cys Val Val Met Arg Lys Asp Asn Lys Lys Asn
 275 280 285
 Asp Ile Asn Ile Ala Trp Asn Leu Ile Cys Thr Leu Leu Asn Lys Ser
 290 295 300
 Thr Ile Tyr
 305

<210> 6674

<211> 62

<212> PRT

<213> S.epidermidis

<400> 6674

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Leu Asp Lys Val Asn Tyr Phe Leu Lys Ala Leu Val Leu Val Ile Met
1          5          10          15
Leu Arg Cys Thr Met Asn Tyr Leu Leu Pro Ser Pro Asp Thr Ile Thr
          20          25          30
Phe Glu Ile Leu Asp Gly Leu Ala Phe Gly Val Leu Thr Val Phe Leu
          35          40          45
Ile Asn Trp Ile Ile Gly Ile Phe Lys Lys Tyr Ser Gln Lys
          50          55          60

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<210> 6675

<211> 47

<212> PRT

<213> S.epidermidis

<400> 6675

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Lys Phe Gln Phe Ser Asn Leu Ser Ile Tyr Leu Arg Tyr Gln Gln Asn
1          5          10          15
Thr Lys Pro Leu Thr Thr Leu Leu Asn Gln Gln Ala Asp Lys Cys Cys
          20          25          30
Asn Pro Asn Leu Gly Leu His Pro Cys Ile Asn Ile Cys Leu Asn
          35          40          45

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<210> 6676

<211> 341

<212> PRT

<213> S.epidermidis

<400> 6676

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Val Ile Glu Phe Lys Asn Val Asn Lys Val Phe Arg Lys Lys Arg Glu
1          5          10          15
Thr Ile Gln Ala Leu Lys Asn Val Ser Phe Lys Ile Asp Gln His Asp
          20          25          30
Ile Phe Gly Val Ile Gly Tyr Ser Gly Ala Gly Lys Ser Thr Leu Val
          35          40          45
Arg Leu Val Asn Gln Leu Glu Thr Val Ser Asp Gly Gln Val Ile Val
          50          55          60
Asp Gly His Glu Ile Asp Thr Tyr Lys Glu Lys Asp Leu Arg Asp Ile
          65          70          75          80
Lys Lys Asp Ile Gly Met Ile Phe Gln His Phe Asn Leu Leu Asn Ser
          85          90          95
Lys Ser Val Tyr Lys Asn Val Ala Met Pro Leu Ile Leu Ser Lys Thr
          100          105          110
Asn Lys Lys Glu Ile Lys Glu Lys Val Asp Glu Met Leu Glu Phe Val
          115          120          125
Gly Leu Ala Asp Lys Lys Asp Gln Phe Pro Asp Glu Leu Ser Gly Gly
          130          135          140
Gln Lys Gln Arg Val Ala Ile Ala Arg Ala Leu Val Thr His Pro Lys
          145          150          155          160
Ile Leu Leu Cys Asp Glu Ala Thr Ser Ala Leu Asp Pro Ala Thr Thr
          165          170          175

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Ser Ser Ile Leu Asn Leu Leu Ser Asn Val Asn Arg Thr Phe Gly Val
      180      185      190
Thr Ile Met Met Ile Thr His Glu Met Ser Val Ile Gln Lys Ile Cys
      195      200      205
His Arg Val Ala Val Met Glu Asn Gly Glu Val Ile Glu Met Gly Thr
      210      215      220
Val Lys Asp Val Phe Ser His Pro Gln Thr Asn Thr Ala Lys Asn Phe
      225      230      235      240
Val Ser Thr Val Ile Asn Thr Glu Pro Ser Lys Glu Leu Arg Ala Ser
      245      250      255
Phe Asn Ser Arg Lys Asp Ser Asn Phe Thr Asp Tyr Lys Leu Phe Leu
      260      265      270
Asp Ser Glu Gln Ile Gln Leu Pro Ile Leu Asn Glu Leu Ile Asn Glu
      275      280      285
His His Leu Asn Val Asn Val Leu Phe Ser Ser Met Ser Glu Ile Gln
      290      295      300
Asp Glu Thr Val Cys Tyr Leu Trp Leu Arg Phe Glu His Asp Glu Ser
      305      310      315      320
Phe Asn Asp Phe Lys Leu Thr Asp Tyr Leu Ser Lys Arg His Ile Arg
      325      330      335
Tyr Glu Glu Val Ile
      340

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<210> 6677
<211> 44
<212> PRT
<213> S.epidermidis

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<400> 6677
Ile Pro Ile Ser Phe Ser Lys Phe Phe Asp Leu Ile Ala Asn Ile His
1      5      10      15
Cys Phe Lys Leu Leu Asn Tyr Asp Leu Lys Ser Phe Asn Ile Ile Ile
      20      25      30
Lys Ser Asn Gln Val Phe Ser Ile Lys Ala Ile Lys
      35      40

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<210> 6678
<211> 63
<212> PRT
<213> S.epidermidis

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<400> 6678
Lys Lys Tyr Ser Cys Leu Tyr Lys Arg Gly Ser Leu Thr Val Pro Leu
1      5      10      15
Asn Thr Ser His Leu Tyr Lys Ile Ser Leu Thr Ser Thr Ile Ile Ser
      20      25      30
Thr Met Ile Tyr Ile Ser Lys Phe Tyr Tyr Ala Ile Asn Thr Tyr Phe
      35      40      45
Pro Leu Tyr Leu Ser Pro Met Leu His Asn Arg Ser Asn Val Ile
      50      55      60

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<210> 6679
<211> 65
<212> PRT
<213> S.epidermidis

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<400> 6679

Glu Ile Asp Ser Asp Phe Ser Glu Leu Asp Thr Leu Pro Asp Ser Asp
 1 5 10 15
 Lys Asn Ser Leu Val Asp Val Leu Phe Asp Ser Ile Ser Asp Leu Leu
 20 25 30
 Phe Val Leu Leu Ser Asp Val Ile Glu Leu Asp Ser Asp Arg Asp Glu
 35 40 45
 Leu Ile Glu Ser Phe Ala Asp Ser Asp Trp Phe Lys Leu Ala Val Val
 50 55 60
 Leu
 65

<210> 6680

<211> 325

<212> PRT

<213> S.epidermidis

<400> 6680

Leu Phe Leu Ser Thr Tyr Val Ile Ser Val Tyr Lys Ser Lys Ile Leu
 1 5 10 15
 Arg Lys Met Glu Leu Phe Met Ser Glu Lys Glu Ile Trp Asp Lys Val
 20 25 30
 Leu Glu Ile Ala Gln Glu Arg Ile Ser Asn Thr Ser Tyr Gln Thr Phe
 35 40 45
 Ile Lys Asp Thr Gln Leu Tyr Ser Leu Lys Asn Asp Glu Ala Ile Ile
 50 55 60
 Leu Val Ser Leu Pro Phe Asn Ala Ser Trp Leu Asn Gln Arg Tyr Ser
 65 70 75 80
 Glu Ile Met Gln Ala Ile Ile Tyr Asp Val Ile Gly Tyr Glu Val Lys
 85 90 95
 Pro His Phe Ile Ser Glu Asp Glu Leu Ala Ser Tyr Asn Asn Val Asn
 100 105 110
 Thr Gln Glu Val Gln Glu Pro Gln Val Gln His Ser Ser Ile Asp Asp
 115 120 125
 Lys Thr Trp Gly Lys Glu Gln Phe Asn Met His Asn Thr Phe Asp Thr
 130 135 140
 Phe Val Ile Gly Pro Gly Asn Arg Phe Pro His Ala Ala Ser Leu Ala
 145 150 155 160
 Val Ala Glu Ala Pro Ala Glu Ala Tyr Asn Pro Leu Phe Ile Tyr Gly
 165 170 175
 Gly Val Gly Leu Gly Lys Thr His Leu Met His Ala Ile Gly His His
 180 185 190
 Val Leu Ser Asn Lys Pro Asn Ala Lys Val Ile Tyr Thr Ser Ser Glu
 195 200 205
 Lys Phe Thr Asn Glu Phe Ile Lys Ser Ile Arg Asp Asn Glu Thr Glu
 210 215 220
 Ala Phe Arg Glu Lys Tyr Arg Lys Ile Asp Val Leu Leu Ile Asp Asp
 225 230 235 240
 Ile Gln Phe Ile Gln Asn Lys Glu Gln Thr Gln Glu Glu Phe Phe His
 245 250 255
 Thr Phe Asn Glu Leu His Gln Asn Asn Lys Gln Ile Val Ile Ser Ser
 260 265 270
 Asp Arg Pro Pro Lys Glu Ile Ala Lys Leu Glu Asp Arg Leu Arg Ser
 275 280 285
 Arg Phe Glu Trp Gly Leu Ile Val Asp Ile Thr Pro Pro Asp Tyr Lys
 290 295 300

Thr Arg Met Ala Ile Leu Gln Lys Lys Leu Lys Lys Lys Ile Leu Ile
 305 310 315 320
 Phe Arg Gln Lys Leu
 325

<210> 6681
 <211> 57
 <212> PRT
 <213> S.epidermidis

<400> 6681
 Leu Leu Leu Ser Phe Val Phe Glu His Ala Ala Ser Val Lys Asp Asn
 1 5 10 15
 Ala Ser Ile Lys Tyr Val Met Thr Leu Phe Phe Ile Glu Leu Ser Asn
 20 25 30
 Ser Phe Tyr Val Ser Ile Ile Lys Gln Cys Phe Lys Phe Ile His Leu
 35 40 45
 Leu Glu Tyr His Leu Ser Lys Asn Ile
 50 55

<210> 6682
 <211> 329
 <212> PRT
 <213> S.epidermidis

<400> 6682
 Lys Val Leu Ser Ser Phe Leu Met Leu Ser Ile Ile Ser Ser Leu Leu
 1 5 10 15
 Thr Ile Cys Val Ile Phe Leu Val Arg Met Leu Tyr Ile Lys Tyr Thr
 20 25 30
 Gln Asn Ile Met Ser His Lys Ile Trp Leu Leu Val Leu Val Ser Thr
 35 40 45
 Leu Ile Pro Leu Ile Pro Phe Tyr Lys Ile Ser Asn Phe Thr Phe Ser
 50 55 60
 Lys Asp Met Met Asn Arg Asn Val Ser Asp Thr Thr Ser Ser Val Ser
 65 70 75 80
 His Met Leu Asp Gly Gln Gln Ser Ser Val Thr Lys Asp Leu Ala Ile
 85 90 95
 Asn Val Asn Gln Phe Glu Thr Ser Asn Ile Thr Tyr Met Ile Leu Leu
 100 105 110
 Ile Trp Val Phe Gly Ser Leu Leu Cys Leu Phe Tyr Met Ile Lys Ala
 115 120 125
 Phe Arg Gln Ile Asp Val Ile Lys Ser Ser Ser Leu Glu Ser Ser Tyr
 130 135 140
 Leu Asn Glu Arg Leu Lys Val Cys Gln Ser Lys Met Gln Phe Tyr Lys
 145 150 155 160
 Lys His Ile Thr Ile Ser Tyr Ser Ser Asn Ile Asp Asn Pro Met Val
 165 170 175
 Phe Gly Leu Val Lys Ser Gln Ile Val Leu Pro Thr Val Val Glu
 180 185 190
 Thr Met Asn Asp Lys Glu Ile Glu Tyr Ile Ile Leu His Glu Leu Ser
 195 200 205
 His Val Lys Ser His Asp Leu Ile Phe Asn Gln Leu Tyr Val Val Phe
 210 215 220
 Lys Met Ile Phe Trp Phe Asn Pro Ala Leu Tyr Ile Ser Lys Thr Met
 225 230 235 240

Met Asp Asn Asp Cys Glu Lys Val Cys Asp Arg Asn Val Leu Lys Ile
 245 250 255
 Leu Asn Arg His Glu His Ile Arg Tyr Gly Glu Ser Ile Leu Lys Cys
 260 265 270
 Ser Ile Leu Lys Ser Gln His Ile Asn Asn Val Ala Ala Gln Tyr Leu
 275 280 285
 Leu Gly Phe Asn Ser Asn Ile Lys Glu Arg Val Lys Tyr Ile Ala Leu
 290 295 300
 Tyr Asp Ser Met Pro Lys Pro Asn Arg Asn Lys Arg Ile Val Ala Tyr
 305 310 315 320
 Ile Val Cys Ser Ile Ser Ser Phe Thr
 325

<210> 6683
 <211> 46
 <212> PRT
 <213> S.epidermidis

<400> 6683
 Thr Asn Ile Ser Thr Met Lys Asn Val Leu Lys Gln Glu Asn Lys Tyr
 1 5 10 15
 Val Ser Lys Glu Leu Lys Ser Lys Asn Thr Lys Ser Lys Ser Met Ile
 20 25 30
 Ile Leu Ser Glu Ser Ile Asp Thr Asn Phe Lys Asn Leu Phe
 35 40 45

<210> 6684
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 6684
 Tyr Tyr Ser Ser Tyr Tyr Ser Phe His Ile Ser Met Val Leu Leu Lys
 1 5 10 15
 Ile Pro Ile Lys Lys Val Ala Tyr Ala Leu Lys Ile Lys Val Ile Thr
 20 25 30
 Ser Phe Ser Leu Asn Leu Met Tyr Met Asp Leu Leu Phe Phe Asn Leu
 35 40 45
 Phe Leu
 50

<210> 6685
 <211> 321
 <212> PRT
 <213> S.epidermidis

<400> 6685
 Leu Val Ser Ser Ile Asp Thr Lys Arg Arg Ile Ile Met Lys Lys Ser
 1 5 10 15
 Val Arg Leu Tyr Asn Met Ile Glu Tyr Cys Asn Glu Asn Arg Asn Phe
 20 25 30
 Lys Leu Asn Asp Leu Met Ser Glu Phe Asn Ile Ser Arg Ser Thr Ala
 35 40 45
 Leu Arg Asp Ile Lys Glu Ile Glu Ala Leu Gly Val Pro Leu Tyr Ser
 50 55 60
 Asn Pro Gly Lys Asn Gly Gly Tyr Thr Ile Ile Gly Asn Arg Asp Gln

Lys Thr Lys Arg Ser Asn Asn Gln
130 135

<210> 6687
<211> 89
<212> PRT
<213> S.epidermidis

<400> 6687
Arg Arg Gln Ser Ile Met Phe Gly Leu Ile Gly Met Ile Ile Val Gly
1 5 10 15
Gly Ile Ile Gly Trp Ile Ala Gly Leu Ile Leu Gly Lys Asp Val Pro
20 25 30
Gly Gly Ile Leu Gly Asn Ile Ile Ala Gly Ile Val Gly Ser Trp Val
35 40 45
Gly Thr Met Ile Leu Gly Glu Trp Gly Pro Gln Leu Gly Lys Ile His
50 55 60
Ile Phe Pro Ala Leu Leu Gly Ser Ile Ile Leu Ile Phe Ile Ile Ser
65 70 75 80
Leu Ile Leu Lys Ala Leu Arg Lys Lys
85

<210> 6688
<211> 413
<212> PRT
<213> S.epidermidis

<400> 6688
Val Lys Phe Leu Ala Ser Gln Leu Phe Lys Gly Gly Phe Phe Ile Asp
1 5 10 15
Tyr Leu Gly Val Asp Ile Ser Lys Arg Ser Ser Val Val Ala His Tyr
20 25 30
Lys Asn Gly Lys Phe Gln Lys Glu Phe Phe Ile Gln Asn Asn Lys Asn
35 40 45
Gly Tyr Asn Tyr Leu Leu Lys Tyr Leu Asn Asp Leu Asp His Pro Gln
50 55 60
Leu Ile Phe Glu Ser Thr Gly Ile Tyr Ser Arg Gly Met Glu Arg Phe
65 70 75 80
Cys Cys Val Asn Gln Ile Asn Tyr Ile Gln Met Asn Pro Leu Glu Ala
85 90 95
Lys Phe Lys Thr Ser Ala Leu Arg Ser Trp Lys Thr Asp Gln Ala Asp
100 105 110
Ala His Lys Leu Ala Cys Leu Gly Pro Thr Leu Lys Gln Thr Gly Ser
115 120 125
Leu Pro Ile His Glu Leu Ile Phe Phe Glu Leu Arg Glu Arg Ala Arg
130 135 140
Phe His Leu Glu Ile Glu Asn Glu Gln Asn Arg Leu Lys Phe Gln Ile
145 150 155 160
Leu Glu Leu Leu His Gln Thr Phe Pro Gly Leu Glu Arg Leu Phe Ser
165 170 175
Ser Arg Tyr Ser Ile Ile Ala Leu Asn Ile Ala Glu Ile Phe Thr His
180 185 190
Pro Asp Val Val Leu Asp Ile Asp Lys Asp Val Leu Ile Thr His Ile
195 200 205
Phe Asn Ser Thr Asp Lys Gly Met Ser Met Asp Lys Ala Thr Lys Tyr
210 215 220

6687 6688 6689

Ala Leu Gln Leu Arg Val Ile Ala Gln Glu Ser Tyr Pro Asn Val Asp
 225 230 235 240
 Arg His Ser Phe Leu Val Glu Lys Leu Arg Leu Leu Ile Gln Gln Leu
 245 250 255
 Lys Gln Ser Ile His His Leu Lys Gln Leu Asp Asp Ala Met Ile Gln
 260 265 270
 Leu Ala Gln Gln Leu Asp Tyr Phe Glu Asn Ile His Ser Ile Pro Gly
 275 280 285
 Ile Gly Lys Leu Ser Thr Ala Met Ile Ile Gly Glu Ile Gly Asp Ile
 290 295 300
 Lys Arg Phe Lys Ser Asn Lys Gln Leu Asn Ala Phe Val Gly Ile Asp
 305 310 315 320
 Ile Lys Arg Tyr Gln Ser Gly His Thr His Cys Arg Asp Thr Ile Asn
 325 330 335
 Lys Arg Gly Asn Lys Lys Ala Arg Lys Leu Leu Phe Trp Val Ile Met
 340 345 350
 Asn Ile Ile Arg Gly Gln His His Tyr Asp Asn His Val Val Asp Tyr
 355 360 365
 Tyr Tyr Lys Leu Arg Lys Gln Pro Asn Glu Lys Pro His Lys Thr Ala
 370 375 380
 Ile Ile Ala Cys Ile Asn Arg Leu Leu Lys Thr Ile His Tyr Leu Val
 385 390 395 400
 Met Asn His Lys Leu Tyr Asp Tyr Gln Met Ser Pro His
 405 410

<210> 6689

<211> 338

<212> PRT

<213> S.epidermidis

<220>

<221> UNSURE

<222> (332), (334)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 6689

Val Lys Phe Leu Ala Ser Gln Leu Phe Lys Gly Gly Phe Phe Ile Asp
 1 5 10 15
 Tyr Leu Gly Val Asp Ile Ser Lys Arg Ser Ser Val Val Ala His Tyr
 20 25 30
 Lys Asn Gly Lys Phe Gln Lys Glu Phe Phe Ile Gln Asn Asn Lys Asn
 35 40 45
 Gly Tyr Asn Tyr Leu Leu Lys Tyr Leu Asn Asp Leu Asp His Pro Gln
 50 55 60
 Leu Ile Phe Glu Ser Thr Gly Ile Tyr Ser Arg Gly Met Glu Arg Phe
 65 70 75 80
 Cys Cys Val Asn Gln Ile Asn Tyr Ile Gln Met Asn Pro Leu Glu Ala
 85 90 95
 Lys Phe Lys Thr Ser Thr Leu Arg Ser Trp Lys Thr Asp Gln Ala Asp
 100 105 110
 Ala His Lys Leu Ala Cys Leu Gly Pro Thr Leu Lys Gln Thr Asp Asn
 115 120 125
 Leu Pro Ile His Glu Leu Ile Phe Phe Glu Leu Arg Glu Arg Val Arg
 130 135 140
 Phe His Leu Glu Ile Glu Asn Glu Gln Asn Arg Leu Lys Phe Gln Ile
 145 150 155 160

Leu Glu Leu Phe His Gln Thr Phe Pro Gly Leu Glu Arg Leu Phe Ser
 165 170 175
 Ser Arg Tyr Ser Ile Ile Ala Leu Asn Ile Ala Glu Ile Phe Thr His
 180 185 190
 Pro Asp Met Val Leu Asp Ile Asp Lys Glu Val Leu Ile Thr His Ile
 195 200 205
 Phe Asn Ser Thr Asp Lys Gly Met Ser Met Asp Lys Ala Thr Lys Tyr
 210 215 220
 Ala Leu Gln Leu Arg Val Ile Ala Gln Glu Ser Tyr Pro Asn Val Asp
 225 230 235 240
 Arg His Ser Phe Leu Val Glu Lys Leu Arg Leu Leu Ile Gln Gln Leu
 245 250 255
 Lys Gln Ser Ile His His Leu Lys Gln Leu Asp Asp Ala Met Ile Gln
 260 265 270
 Leu Ala Gln Gln Leu Asp Tyr Phe Glu Asn Ile His Ser Ile Pro Gly
 275 280 285
 Ile Gly Lys Leu Ser Thr Ala Met Ile Ile Gly Glu Ile Gly Asp Ile
 290 295 300
 Lys Arg Phe Lys Ser Asn Lys Gln Leu Asn Ala Phe Val Gly Ile Asp
 305 310 315 320
 Ile Lys Arg Asp Pro Gly Thr Ser Tyr Thr Phe Xaa Ile Xaa Val Arg
 325 330 335
 Gln Arg

<210> 6690

<211> 181

<212> PRT

<213> S.epidermidis

<400> 6690

Phe Ser Thr Phe Asn Phe Phe Leu Leu Ser Ala Cys Thr Ile Asn Ile
 1 5 10 15
 Glu Arg Asp Glu Glu Asn Ser Glu Lys Asn Lys Gln Lys Glu Asn Thr
 20 25 30
 His Thr Asp Ser Asn Asn Thr Ser Ser Asn Glu Ser Asn Thr Ser Lys
 35 40 45
 Gln Ser Ser Gln Glu Asn Thr Ile Asn Gln Thr Glu Gln Asn Gln Pro
 50 55 60
 Thr Glu Asn Asn Ser Ser Ser Gln Gln Asp Leu Gln Leu Ile Thr Glu
 65 70 75 80
 Asn Glu Ala Ile Gln Lys Val Lys Asp Glu Phe Pro Pro Ile Arg Thr
 85 90 95
 Gly Asn Asp Tyr Arg Ile Asp Thr Thr Arg Thr Asp Asn Asn Val Tyr
 100 105 110
 Ala Ile Lys Phe Thr Ser Gln Asp Ala Glu Gly Tyr Pro Met Lys Ala
 115 120 125
 Ala Val Thr Ile Asp Lys Arg Thr Gly Glu Phe Ile Asp Tyr Ile Asp
 130 135 140
 Asp Arg Ser Asp Glu Asp Lys Glu Arg His Val Gln His Ala Lys Glu
 145 150 155 160
 Ser Thr Leu Tyr Lys Gly Pro Tyr Asp Ala Phe Arg Lys Asp Phe Ser
 165 170 175
 His Lys Ile Asn Glu
 180

<210> 6691
 <211> 80
 <212> PRT
 <213> S.epidermidis

<400> 6691
 Arg Ser Thr Leu Met Thr Leu Leu Thr Lys Val Leu Asp Thr Leu Thr
 1 5 10 15
 Gly Ile Cys Val Ala Leu Leu Phe Thr Lys Tyr Phe Val Asn Tyr Ala
 20 25 30
 Asn Asp Met Phe Asp Trp His Leu Arg Trp Tyr Phe Leu Glu Asn Val
 35 40 45
 Pro His Leu Ala Leu Ile Leu Phe Ile Leu Val Phe Ile Phe Ala Val
 50 55 60
 Pro Ser Glu Met Ile Lys Asp Lys Asn Lys Lys Lys His Asn Asp Ser
 65 70 75 80

<210> 6692
 <211> 55
 <212> PRT
 <213> S.epidermidis

<400> 6692
 Ile Leu Thr Leu Tyr Leu Ser Phe Tyr Glu Thr Leu Asn Ile Leu Phe
 1 5 10 15
 Ile His Ile Phe Thr Thr Leu Leu Phe Tyr Gln Leu Glu Asn Ile Arg
 20 25 30
 Lys Cys Asn Ile Asn His Lys Ala Cys Lys Thr Ser Phe Ala Leu Asp
 35 40 45
 His Asp Ala Leu Ser Phe His
 50 55

<210> 6693
 <211> 184
 <212> PRT
 <213> S.epidermidis

<400> 6693
 Phe Cys Met Phe Ser Tyr Gln Ile Asn Lys Asn Ile Lys Leu Lys Ile
 1 5 10 15
 Leu Glu Glu Arg Glu Ala Glu Gln Leu Phe Lys Leu Val Asp Ser Asn
 20 25 30
 Arg Asp Tyr Leu Ala Glu Phe Leu Pro Phe Val Glu His Thr Lys Lys
 35 40 45
 Val Glu Asp Ser Lys His Phe Ile His Ser Ala Leu Gln Gln Phe Ile
 50 55 60
 Asp Gly Asn Gly Phe His Cys Gly Ile Trp Ser Asn Lys Glu Leu Ile
 65 70 75 80
 Gly Val Ile Gly Leu His Tyr Leu Asp Leu Val Asn Lys Thr Thr Ser
 85 90 95
 Ile Gly Tyr Tyr Leu Ala Glu Asp Phe Gln Lys Lys Gly Ile Met Thr
 100 105 110
 Lys Cys Thr Lys Ala Leu Ile Arg Tyr Val Tyr Glu Val Tyr Asp Ile
 115 120 125
 Asn Arg Ile Glu Ile Arg Met Ser Thr Lys Asn Lys Lys Ser Arg Ala
 130 135 140

6691-6693

Ile Pro Ile Arg Leu Gly Phe Thr Gln Glu Gly Ile Leu Arg Ser Asn
 145 150 155 160
 Glu Arg Leu Gln Gly Glu Phe Ser Asp Ser Tyr Val Phe Ser Leu Leu
 165 170 175
 Arg Glu Glu Cys Thr Tyr Thr Arg
 180

<210> 6694
 <211> 108
 <212> PRT
 <213> S.epidermidis

<400> 6694
 Lys Cys Ile Pro Phe Tyr Phe Gln Lys Ser Ser Ser Ser Ile Ile Lys
 1 5 10 15
 Ile Ser Ser Thr Gly Ser Pro Lys Ile Leu Ala Ile Phe Ile Ala Val
 20 25 30
 Asn Ile Asp Gly Val Lys Ser Leu Arg Ser Ile Lys Asp Thr Val Cys
 35 40 45
 Arg Asp Ile Pro Ala Phe Leu Ala Ser Ser Val Trp Leu Tyr Pro Ser
 50 55 60
 Arg Ala Arg Asn Ser Leu Ser Leu Leu Arg Lys Leu Tyr His Phe Leu
 65 70 75 80
 Thr Tyr Lys Leu Tyr Asn Ile Phe Val Ile Met Thr Ser Ile Leu Val
 85 90 95
 Lys Met Thr Lys Ile Ile Asp Phe Leu Gly Ile Val
 100 105

<210> 6695
 <211> 65
 <212> PRT
 <213> S.epidermidis

<400> 6695
 Phe Pro Ser Pro Leu Ala Glu Leu Val Asn Lys Tyr Ser Tyr Ser Leu
 1 5 10 15
 Ile Pro Asn Lys Leu Ser Ser Thr Ala Leu Phe Gln Leu Arg Lys Tyr
 20 25 30
 Lys Asn Asn Pro Leu Thr Ile Ala Val Lys Gly Leu Leu His Tyr Tyr
 35 40 45
 Ile Ile Phe Tyr Ser His Ser Ile Val Leu Gly Gly Leu Glu Val Met
 50 55 60
 Ser
 65

<210> 6696
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6696
 Asn Leu Ser Phe Ile Tyr Leu Leu Glu Val Tyr Ile Leu Gln Thr Ser
 1 5 10 15
 Lys Leu Ile Val Thr Thr Ile Ile Ile Ile Leu Leu Ser Phe Phe Ile
 20 25 30
 Leu Leu Cys Phe Phe Phe Asn Phe Tyr

35

40

<210> 6697
 <211> 192
 <212> PRT
 <213> S.epidermidis

<400> 6697

Val	Glu	Ser	Leu	Gly	Arg	Lys	Val	Lys	Glu	Asp	Gly	Val	Val	Ile	Asp
1				5					10					15	
Glu	Lys	Ile	Leu	Lys	Val	Asp	Gly	Phe	Leu	Asn	His	Gln	Ile	Asp	Ala
			20					25					30		
Lys	Leu	Met	Asn	Asp	Val	Gly	Lys	Thr	Phe	Tyr	Glu	Ser	Phe	Lys	Asp
		35					40					45			
Ala	Gly	Ile	Thr	Lys	Ile	Leu	Thr	Ile	Glu	Ala	Ser	Gly	Ile	Ala	Pro
	50					55					60				
Ala	Ile	Met	Ala	Ser	Phe	His	Phe	Asp	Val	Pro	Cys	Leu	Phe	Ala	Lys
65					70					75					80
Lys	Ala	Lys	Pro	Ser	Thr	Leu	Lys	Asp	Gly	Phe	Tyr	Ser	Thr	Asp	Ile
				85					90					95	
His	Ser	Phe	Thr	Lys	Asn	Lys	Thr	Ser	Thr	Val	Ile	Val	Ser	Glu	Glu
			100					105					110		
Phe	Leu	Gly	Ala	Asp	Asp	Lys	Val	Leu	Ile	Ile	Asp	Asp	Phe	Leu	Ala
		115					120					125			
Asn	Gly	Asp	Ala	Ser	Leu	Gly	Leu	Asn	Asp	Ile	Val	Lys	Gln	Ala	Asn
	130					135						140			
Ala	Thr	Thr	Val	Gly	Val	Gly	Ile	Val	Val	Glu	Lys	Ser	Phe	Gln	Asn
145					150					155					160
Gly	Arg	Gln	Arg	Leu	Glu	Asp	Ala	Gly	Leu	Tyr	Val	Ser	Ser	Leu	Cys
				165					170					175	
Lys	Val	Ala	Ser	Leu	Lys	Gly	Asn	Lys	Val	Thr	Leu	Leu	Gly	Glu	Ala
			180					185						190	

<210> 6698
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 6698

Leu	Tyr	Phe	Phe	Thr	Leu	Gln	Gln	Asn	Pro	Ser	Phe	Ile	Gln	Cys	Ser
1				5					10					15	
Glu	Gly	Val	Leu	Lys	Asn	Ser	Leu	Gln	Ser	Ala	Ile	Phe	Val	Leu	Asp
			20					25					30		
Pro	Leu	Leu	Thr	Met	Arg	Asp	Ser								
		35					40								

<210> 6699
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 6699

Ile	Lys	Lys	Pro	Val	Asn	Glu	Phe	Met	Lys	Thr	His	Leu	Leu	Ser	Ile
1				5					10					15	
Leu	Ile	Gly	Ile	Met	Ser	Gln	Ala	Leu	Tyr	Pro	Thr	Ile	Ser	Gln	Val
			20					25					30		

Leu Ile Ile Lys Ile Ser Ile Thr
35 40

<210> 6700

<211> 366

<212> PRT

<213> S.epidermidis

<400> 6700

Ile	Met	Ala	Leu	Thr	Ala	Gly	Ile	Val	Gly	Leu	Pro	Asn	Val	Gly	Lys
1				5					10					15	
Ser	Thr	Leu	Phe	Asn	Ala	Ile	Thr	Lys	Ala	Gly	Ala	Leu	Ala	Ala	Asn
		20						25					30		
Tyr	Pro	Phe	Ala	Thr	Ile	Asp	Pro	Asn	Val	Gly	Ile	Val	Glu	Val	Pro
		35					40					45			
Asp	Ser	Arg	Leu	Ile	Lys	Leu	Glu	Glu	Met	Val	Gln	Pro	Lys	Lys	Thr
	50					55					60				
Ile	Pro	Thr	Thr	Phe	Glu	Phe	Thr	Asp	Ile	Ala	Gly	Ile	Val	Lys	Gly
65					70					75					80
Ala	Ser	Lys	Gly	Glu	Gly	Leu	Gly	Asn	Lys	Phe	Leu	Ser	His	Ile	Arg
				85					90					95	
Glu	Val	Asp	Ala	Ile	Cys	Gln	Val	Val	Arg	Ala	Phe	Asp	Asp	Glu	Asn
			100					105					110		
Val	Thr	His	Val	Ser	Gly	Arg	Val	Asn	Pro	Leu	Asp	Asp	Ile	Glu	Val
		115					120						125		
Ile	Asn	Met	Glu	Leu	Val	Leu	Ala	Asp	Leu	Glu	Ser	Val	Glu	Lys	Arg
	130					135					140				
Leu	Pro	Lys	Ile	Glu	Lys	Met	Ala	Arg	Gln	Lys	Asp	Lys	Thr	Ala	Glu
145					150					155					160
Met	Glu	Leu	Arg	Ile	Leu	Thr	Gln	Ile	Lys	Glu	Ala	Leu	Glu	Asp	Gly
				165					170					175	
Lys	Pro	Val	Arg	Ser	Ile	Asp	Phe	Asn	Glu	Asp	Asp	Gln	Lys	Trp	Val
			180					185					190		
Asn	Gln	Ala	Gln	Leu	Leu	Thr	Ser	Lys	Lys	Met	Leu	Tyr	Ile	Ala	Asn
		195					200					205			
Val	Gly	Glu	Asp	Glu	Ile	Gly	Asp	Lys	Asp	Asn	Asp	Lys	Val	Lys	Ala
	210					215					220				
Ile	Arg	Glu	Tyr	Ala	Ala	Asn	Glu	Asp	Ser	Glu	Val	Ile	Val	Ile	Ser
225					230					235					240
Ala	Lys	Ile	Glu	Glu	Glu	Ile	Ala	Thr	Leu	Asp	Asp	Glu	Asp	Lys	Glu
				245					250					255	
Met	Phe	Leu	Glu	Asp	Leu	Asp	Ile	Glu	Glu	Pro	Gly	Leu	Asp	Arg	Leu
		260						265					270		
Ile	Arg	Thr	Thr	Tyr	Asp	Leu	Leu	Gly	Leu	Ser	Thr	Tyr	Phe	Thr	Ala
		275					280					285			
Gly	Val	Gln	Glu	Val	Arg	Ala	Trp	Thr	Phe	Lys	Gln	Gly	Met	Thr	Ala
	290					295					300				
Pro	Gln	Cys	Ala	Gly	Ile	Ile	His	Thr	Asp	Phe	Glu	Arg	Gly	Phe	Ile
305					310					315					320
Arg	Ala	Glu	Val	Thr	Ser	Tyr	Glu	Asp	Tyr	Val	Gln	His	Gly	Gly	Glu
				325					330					335	
Asn	Gly	Ala	Lys	Glu	Ala	Gly	Arg	Gln	Arg	Leu	Glu	Gly	Lys	Asp	Tyr
			340					345					350		
Ile	Met	Gln	Asp	Gly	Asp	Ile	Val	His	Phe	Arg	Phe	Asn	Val		
		355					360					365			

CCCTGGGGG

<210> 6701
 <211> 56
 <212> PRT
 <213> S.epidermidis

<400> 6701
 Arg Ala Ile Thr Thr Val Ile Arg Glu Thr Tyr Asn Asn Glu Ser Ile
 1 5 10 15
 Pro Leu Asp Leu Gln Ile Leu Leu Trp His Met Val Glu Glu Lys Asp
 20 25 30
 Asn Gln Pro Gln Lys Leu Tyr His Leu Leu Leu Ile Ile Leu Thr Ala
 35 40 45
 Ser Leu Ile Ile Phe Phe Val Asn
 50 55

<210> 6702
 <211> 53
 <212> PRT
 <213> S.epidermidis

<400> 6702
 Ala Ile Ser Thr Asp Ser Leu Phe Leu Ile Ile Lys Pro Leu Cys Ala
 1 5 10 15
 Pro Ile Glu Val Glu Arg Ala Val Thr Lys Gly Ile Ala Asn Pro Lys
 20 25 30
 Ala Cys Gly Gln Ala Met Thr Asn Thr Val Thr Arg Arg Ser Ser Ala
 35 40 45
 Lys Ser Thr Ser Phe
 50

<210> 6703
 <211> 187
 <212> PRT
 <213> S.epidermidis

<400> 6703
 Thr Ala Glu Leu Pro Lys Lys Thr Thr Arg Ile Gly Lys Pro Tyr Tyr
 1 5 10 15
 Lys Thr Asp Asn Leu Leu Gln Arg Gln Phe Lys Ala Ser Cys Pro Met
 20 25 30
 Glu Val Leu Thr Thr Asp Ile Thr Tyr Leu Pro Phe Gly His Ser Met
 35 40 45
 Leu Tyr Leu Ser Ser Ile Met Asp Ile Tyr Asn Gly Glu Ile Val Ala
 50 55 60
 Tyr Lys Ile Asp Asp Lys Gln Asp Gln Ser Leu Val Asn Asp Thr Leu
 65 70 75 80
 Asn Gln Ile Asp Ile Pro Glu Gly Cys Ile Leu His Ser Asp Gln Gly
 85 90 95
 Ser Val Tyr Thr Ser Tyr Ala Tyr Tyr Gln Leu Tyr Glu Glu Lys Gly
 100 105 110
 Ile Ile Arg Ser Met Ser Arg Lys Gly Thr Pro Ala Asp Asn Ala Pro
 115 120 125
 Ile Glu Ser Phe His Ser Ser Leu Lys Ser Glu Thr Phe Tyr Ile Asn
 130 135 140
 Asn Glu Leu Asn Arg Ser Asn His Ile Val Ile Asp Ile Val Glu Lys
 145 150 155 160

6701 6702 6703

Tyr Ile Lys Asn Tyr Asn Asn Asn Arg Ile Gln Gln Lys Leu Gly Tyr
 165 170 175
 Leu Ser Pro Val Lys Tyr Arg Glu Leu Ile Ala
 180 185

<210> 6704

<211> 147

<212> PRT

<213> S.epidermidis

<400> 6704

Leu Val Tyr Thr Leu His Leu Leu Tyr Phe Lys Lys Glu Val Ser Met
 1 5 10 15
 Met Thr Lys Lys Ile Ile Tyr Phe Ile Cys Thr Gly Asn Ser Cys Arg
 20 25 30
 Ser Gln Met Ala Glu Gly Trp Gly Lys Lys Ile Leu Gly Asp Glu Trp
 35 40 45
 Gln Val Tyr Ser Gly Gly Ile Glu Ala His Gly Val Asn Pro Lys Ala
 50 55 60
 Ile Glu Ala Met Lys Glu Val Gly Ile Asp Ile Ser Asn His Thr Ser
 65 70 75 80
 Asn Leu Ile Asp Lys Asn Ile Leu Asn Gln Ser Asp Leu Val Val Thr
 85 90 95
 Leu Cys Ser Asp Ala Asp Asn Asn Cys Pro Ile Leu Pro Pro Asn Val
 100 105 110
 Lys Lys Glu His Trp Gly Phe Asp Asp Pro Ala Gly Lys Pro Trp Ser
 115 120 125
 Glu Phe Gln Arg Val Arg Asp Glu Ile Lys Thr Ala Ile Glu Ser Phe
 130 135 140
 Lys Thr Arg
 145

<210> 6705

<211> 425

<212> PRT

<213> S.epidermidis

<400> 6705

Val Met Glu Phe Asn Gly Ile Leu Glu Asp Tyr Ala Thr Tyr Ile Tyr
 1 5 10 15
 Arg Gly Lys Gln Pro Lys Tyr Ser Thr Asn Gly Ile Pro Val Ile Asn
 20 25 30
 Gln Lys Ala Ile Gln Trp Ser Gly Leu Asn Lys Glu Phe Leu Lys Phe
 35 40 45
 His Asn Asn Glu Ile Lys Val Asp Ser Arg His Phe Val Lys Lys Asn
 50 55 60
 Asp Leu Leu Ile Asn Ser Thr Gly Thr Gly Thr Val Gly Arg Val Tyr
 65 70 75 80
 His Phe Lys Phe Gln Pro Glu Lys Met Phe Val Asp Ser His Ile Thr
 85 90 95
 Ile Ile Arg Thr Asp Glu Asn Lys Leu Arg Ser Arg Phe Leu Tyr Tyr
 100 105 110
 Gln Met Arg Thr Asn Lys Phe Gln Asn Met Ile Leu Asn Glu Phe Leu
 115 120 125
 Ala Gly Ser Thr Gly Gln Val Glu Phe Asn Lys Ser Met Val Lys Lys
 130 135 140

Leu Pro Ile Ser Ile Pro Glu Val Asn Tyr Gln Asp Val Val Ile Lys
 145 150 155 160
 Val Leu Asp Glu Leu Glu Asp Lys Ile Glu Ile Asn Lys Lys Ile Ile
 165 170 175
 Ala Asn Leu Glu Glu Leu Ser Gln Thr Leu Phe Lys Arg Trp Phe Val
 180 185 190
 Asp Phe Glu Phe Pro Asn Glu Glu Gly Asn Pro Tyr Lys Ser Ser Gly
 195 200 205
 Gly Glu Met Ile Asp Ser Glu Leu Gly Lys Ile Pro Ser Asn Trp Lys
 210 215 220
 Ile Tyr Lys Leu Lys Asp Ile Ala Ser His Lys Lys Glu Thr Phe Asn
 225 230 235 240
 Pro Lys Lys Ser Glu Glu Val Thr Val Lys His Phe Ser Leu Pro Ala
 245 250 255
 Tyr Asp Asn Glu Glu Gln Ala Ile Glu Glu Glu Val Asn Lys Ile Lys
 260 265 270
 Ser Asn Lys Trp Ile Ile Asn Asn Asn Cys Val Leu Phe Ser Lys Met
 275 280 285
 Asn Pro Asp Thr Lys Arg Ile Trp Leu Pro Val Ile Asp Asn Lys Lys
 290 295 300
 Leu Asn Val Ala Ser Ser Glu Phe Val Val Met Glu Ser Pro Asn Asn
 305 310 315 320
 Lys Ile Asn Ser Phe Ile Tyr Asn Ile Cys Leu Asn Ser Gln Phe Ile
 325 330 335
 Asp Tyr Leu Lys Ala Asn Thr Thr Gly Ser Thr Asn Ser Arg Gln Arg
 340 345 350
 Val Lys Pro Thr Ile Ala Val Asn Tyr Lys Leu Ala Ile Glu Asp Ser
 355 360 365
 Ile Val Lys Lys Tyr Ser Glu Ile Ile Thr Pro Tyr Met Glu Glu Met
 370 375 380
 Lys Ile Leu Arg Ser Glu Ile Gly Lys Leu Thr Gln Leu Arg Asp Thr
 385 390 395 400
 Leu Leu Pro Lys Leu Met Ser Gly Glu Leu Glu Ile Ser Asp Asp Ile
 405 410 415
 Glu Val Asn Ser Asp Glu Leu Ser Ile
 420 425

<210> 6706

<211> 127

<212> PRT

<213> S.epidermidis

<400> 6706

Ser Ser Asn Thr Arg Thr Gln Thr Lys Ile Glu Ile Thr Ile Tyr Lys
 1 5 10 15
 Arg Gly Asp Tyr Ser Met Glu Phe Ile Lys Ser Ser Ser Asn Gly Thr
 20 25 30
 Glu Glu Glu Gln Leu Glu Phe Tyr Glu Gln Ile Phe Asn Ala Leu Ala
 35 40 45
 Asp Lys Ile Arg Leu Lys Ile Leu His Ser Ile Arg Gln Ser Asn Thr
 50 55 60
 Lys Ser Leu Cys Val Cys Asp Leu Glu Glu Leu Leu Glu Leu Lys Gln
 65 70 75 80
 Ser Lys Leu Ser Tyr His Leu Lys Lys Leu Val Asp Ala Asn Ile Leu
 85 90 95
 Ile Ala Glu Lys His Gly Thr Trp Asn Tyr Tyr Lys Ile Asn Glu Gln

		100					105					110			
Gln	Ile	Gln	Val	Val	Leu	Asn	Glu	Asp	Thr	Cys	Cys	Lys	Ile	Leu	
		115					120					125			

<210> 6707

<211> 564

<212> PRT

<213> S.epidermidis

<400> 6707

Leu	Leu	Cys	Thr	Arg	Cys	Ser	Ile	Val	Arg	Cys	Val	Trp	Arg	Arg	Ile
1				5					10					15	
Ile	Met	Asn	His	Ile	Leu	Gln	Met	Leu	Ser	Lys	Leu	Leu	Ser	Val	Ala
			20					25					30		
Lys	Glu	Ala	Ile	Asp	Arg	Gln	Gly	Leu	Ile	Ala	Ile	Leu	Thr	Ile	Pro
		35					40					45			
Val	Asn	Asn	Asp	Asp	Glu	Ile	Glu	Glu	Thr	Ala	Gln	Gly	Glu	Thr	Val
	50					55					60				
Tyr	Asn	Glu	Leu	Ile	Asp	Gln	Leu	Arg	Leu	Asn	Ile	Pro	Lys	Asp	Thr
65					70					75				80	
Asp	Tyr	Arg	Pro	Asn	Ile	Tyr	Ser	Tyr	Phe	Gly	Ile	Lys	Lys	Asn	Pro
				85					90					95	
Asn	Asp	Thr	Val	Leu	Met	Glu	Met	Met	Ile	Lys	Val	Phe	His	Ile	Lys
			100					105					110		
Arg	Phe	Asn	Ser	Glu	Leu	Phe	Val	Phe	Lys	Ala	Asn	Gly	Trp	Gln	Lys
		115					120					125			
Ile	Asn	Gly	Asp	Glu	Leu	Gln	Gly	Leu	Ile	Ser	Lys	Met	Ile	Gln	Val
	130					135					140				
Leu	Leu	Val	Asp	Tyr	Lys	Pro	Ser	Leu	Ser	Thr	Leu	Lys	Asn	Val	Val
					150					155				160	
Asp	Gly	Leu	Gln	Lys	Ser	Thr	Asp	Val	Glu	Glu	Leu	Val	Glu	Asn	Glu
				165					170					175	
His	Tyr	Ile	Gly	Cys	Gly	Glu	Asn	Met	Phe	Asp	Leu	Asn	Thr	Phe	Gln
			180					185					190		
Val	Val	Lys	Asn	Ser	Ile	Asp	Ile	Phe	Pro	Lys	Thr	Arg	Leu	Asn	Leu
		195					200					205			
Ser	Leu	Ser	Thr	Asn	Asp	Val	Ile	Thr	Asp	Lys	Ile	Pro	Pro	Tyr	Phe
	210				215						220				
Lys	Gln	Tyr	Met	Leu	Gln	Leu	Ala	Asn	Tyr	Asp	Asp	Asp	Leu	Gln	Tyr
	225				230					235				240	
Phe	Leu	Phe	Gln	His	Thr	Ala	Val	Leu	Leu	Thr	Ala	Asp	Thr	Lys	Tyr
				245					250					255	
Arg	Arg	Gly	Leu	Ile	Leu	Tyr	Gly	Gly	Ala	Lys	Asn	Gly	Lys	Ser	Val
		260					265						270		
Tyr	Ile	Glu	Leu	Val	Lys	Ser	Phe	Phe	Tyr	Ser	Lys	Asp	Ile	Val	Ser
	275						280					285			
Lys	Pro	Leu	Asn	Glu	Leu	Glu	Gly	Arg	Phe	Asp	Lys	Glu	Ser	Leu	Ile
	290					295					300				
Asp	Lys	Ser	Leu	Met	Ala	Ser	His	Glu	Ile	Gly	Gln	Ser	Lys	Ile	Gln
	305				310					315				320	
Glu	Lys	Ile	Val	Asn	Asp	Phe	Lys	Lys	Leu	Leu	Ser	Val	Glu	Ser	Met
				325					330					335	
His	Val	Asp	Arg	Lys	Gly	Lys	Thr	Gln	Val	Glu	Val	Ile	Leu	Asp	Leu
			340					345					350		
Lys	Leu	Ile	Phe	Ser	Thr	Asn	Ala	Ile	Leu	Asn	Phe	Pro	Pro	Glu	His
	355						360					365			

Ala Lys Ala Leu Glu Arg Arg Ile Asn Ile Ile Pro Cys Glu Tyr Tyr
 370 375 380
 Val Glu Lys Ala Asp Thr Ser Leu Ile Asp Lys Leu Gln Ser Glu Lys
 385 390 395 400
 Lys Glu Ile Phe Leu Tyr Leu Met Tyr Val Tyr Gln Gln Ile Val Lys
 405 410 415
 Ala Asp Ile Glu Tyr Leu Glu Asn Ser Arg Val Thr Glu Ile Thr His
 420 425 430
 Asp Trp Leu Asn Phe Gly Tyr Glu Phe Val Ser Ser Arg Ser Val Ser
 435 440 445
 Ile Ala Asn Gln Lys Ala Cys Ile Asn Leu Leu Arg Lys Leu Ile Glu
 450 455 460
 Ile Lys Ser Gly Ser Arg Ile Lys Val Ser Glu Leu Asn Lys Val Ile
 465 470 475 480
 Asn Glu Glu Ile Lys Val Ser Ser Gln Val Ile Asn Gln Leu Ile Gln
 485 490 495
 Ala Asn Phe Asp Thr Gln Thr Lys Leu Tyr Asn Gly Tyr Asp Tyr Trp
 500 505 510
 Ile Asp Leu Gly Trp Lys Glu Ala Asn Lys Lys Glu Ile His Asp Ile
 515 520 525
 Ser Glu Lys Asp Asn Ile Ile Ser Leu Asp Lys Asn Glu Asn Ile Thr
 530 535 540
 Asp Asp Glu Ala Leu Asp Glu Glu Asn Leu Asp Phe Asp Trp Glu Asp
 545 550 555 560
 Cys Asp Asp Glu

<210> 6708

<211> 74

<212> PRT

<213> S.epidermidis

<400> 6708

Lys Gly Val Thr Gly Asn Gly Lys Ser Tyr Ile Ala Phe Thr Leu Val
 1 5 10 15
 Asn His Ala Ile Asp Asn Arg Tyr Ser Val Leu Phe Tyr Arg Leu Thr
 20 25 30
 Asp Leu Leu Ser Lys Leu Gln Gln Ala Asp Tyr Asn Ser Ile Asp Lys
 35 40 45
 Leu Leu Lys Val Ile Ser Arg Thr Asp Ile Leu Val Asn Asp Asp Phe
 50 55 60
 Leu Leu Pro Tyr Thr Thr Glu Gln Glu Gln
 65 70

<210> 6709

<211> 380

<212> PRT

<213> S.epidermidis

<400> 6709

Ile Tyr Tyr Thr Arg Arg Ile Tyr Met Asn Lys Lys Leu Leu Trp Ser
 1 5 10 15
 Ile Ile Gly Ile Val Ile Ile Val Val Leu Ile Ile Ala Ala Phe Ile
 20 25 30
 Leu Lys Gln Val Asn Gly Ser Gly Ser Lys Asp Ser Lys Ala Tyr Asp
 35 40 45

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Thr Tyr Thr Val Arg Lys Glu Thr Pro Ile Ser Leu Glu Gly Lys Ala
 50          55          60
Ser Pro Glu Ser Val Lys Thr Tyr Asn Asn Asn Gln Ser Val Gly Asn
65          70          75          80
Phe Leu Ser Val Ser Val Gln Asp Gly Gln Thr Val Lys Gln Gly Glu
          85          90          95
Arg Ile Ile Asn Tyr Asp Thr Asn Gly Asn Lys Arg Gln Gln Leu Val
          100          105          110
Asn Lys Val Asn Gln Ala Gln Ser Gln Val Asn Asp Asp Tyr Gln Lys
          115          120          125
Val Asn Gln Ser Pro Asn Asn His Gln Leu Gln Val Lys Leu Thr Gln
          130          135          140
Asp Gln Ser Ala Leu Asn Glu Ala Gln Gln Ser Leu Ser Gln Tyr Asp
145          150          155          160
Arg Gln Leu Asn Asp Ser Met Asn Ala Ser Phe Asp Gly Lys Ile Asn
          165          170          175
Ile Lys Asn Asp Ser Asp Val Gly Glu Gly Gln Pro Ile Leu Gln Leu
          180          185          190
Ile Ser Ser Asn Pro Gln Ile Asn Ala Thr Ile Thr Glu Phe Asp Ile
          195          200          205
Asn Lys Ile Lys Glu Gly Asp Glu Val Asp Val Thr Val Asn Ser Thr
          210          215          220
Gly Lys Lys Gly Lys Gly Lys Ile Leu Lys Ile Asp Glu Leu Pro Thr
225          230          235          240
Ser Tyr Asp Thr Ser Asp Asp Ser Thr Ala Ser Ser Ala Gln Ala Gly
          245          250          255
Ala Gln Gly Asp Ser Glu Glu Gly Thr Glu Met Thr Thr Ser Asn Pro
          260          265          270
Thr Ile Asn Gln Pro Thr Gly Gly Lys Ser Gly Glu Thr Ser Lys Tyr
          275          280          285
Lys Val Ile Ile Gly Asp Leu Asp Ile Pro Val Arg Ser Gly Phe Ser
          290          295          300
Met Asp Ala Lys Ile Pro Leu Lys Thr Lys Lys Leu Pro Asn Asn Val
305          310          315          320
Leu Thr Lys Asp Asn Asn Val Phe Val Val Asp Lys Asn Asn Lys Val
          325          330          335
His Lys Arg Glu Ile Lys Ile Glu Arg Asn Asn Gly Glu Ile Ile Val
          340          345          350
Lys Lys Gly Leu Lys Ser Gly Asp Lys Val Leu Lys Ser Pro Lys Gly
          355          360          365
Asn Leu Asn Asp Gly Glu Lys Val Glu Val Ser Ser
          370          375          380

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<210> 6710

<211> 114

<212> PRT

<213> S.epidermidis

<400> 6710

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Thr Lys Leu Thr Arg Cys Leu Met Tyr Lys Asp Tyr Asn Met Thr Gln
1          5          10          15
Leu Thr Leu Pro Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile
          20          25          30
Ser Arg His Val Asn Asp Ile Val Glu Thr Ile Pro Glu Thr Glu Phe
          35          40          45
Asp Glu Phe Arg His His Arg Gly Ala Thr Ser Tyr His Pro Lys Met

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50 55 60
 Met Leu Lys Val Val Leu Tyr Ala Tyr Thr Gln Ser Val Phe Ser Gly
 65 70 75 80
 Arg Lys Ile Glu Lys Leu Leu Asn Asp Ser Ile Arg Met Met Trp Leu
 85 90 95
 Ser Gln Asn Gln Lys Leu Ser Asn Lys Pro Cys Asn Pro Gln Gly Cys
 100 105 110
 Pro Gln

<210> 6711
 <211> 90
 <212> PRT
 <213> S.epidermidis

<400> 6711
 Ala Pro Ser Thr Lys Val Ala Met Ala Lys Val Ile Lys Ala Phe Lys
 1 5 10 15
 Leu Lys Pro Asp Cys His Cys Thr Ser Lys Tyr Leu Asn Asn Leu Ile
 20 25 30
 Glu Gln Asp His Arg His Ile Lys Val Arg Lys Thr Arg Tyr Gln Ser
 35 40 45
 Ile Asn Thr Ala Lys Asn Thr Leu Lys Gly Ile Glu Cys Ile Tyr Gly
 50 55 60
 Leu Tyr Lys Lys Asn Arg Lys Ser Leu Gln Ile Cys Gly Phe Ser Pro
 65 70 75 80
 Cys His Glu Ile Ser Ile Met Leu Thr Ser
 85 90

<210> 6712
 <211> 63
 <212> PRT
 <213> S.epidermidis

<400> 6712
 Thr Ile Ala Thr Phe Gln Pro Asn Lys Thr His Ser Ile Asn Thr Ile
 1 5 10 15
 Asn Gly Phe Ile Asn Gly Glu Ala Ile Lys Lys Leu Thr Ala Gly Pro
 20 25 30
 Lys Gly Thr Leu Glu Phe Asn Arg Pro Ala Ser Ile Gly Ile Val Glu
 35 40 45
 Gln Glu Gln Lys Gly Val Ile Ala Pro Asn Ile Ile Pro Lys Lys
 50 55 60

<210> 6713
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 6713
 Pro Phe Gln Thr Arg Arg Cys Thr Asn Arg Asn Tyr Lys Gly Val Ile
 1 5 10 15
 Tyr Gln Asp Ser Val Pro Ala Phe Tyr Phe Lys Asn Ile Tyr Leu Cys
 20 25 30
 Leu Ile Ile Phe His Ile Ala Ile Lys Leu Lys
 35 40

<210> 6714
 <211> 109
 <212> PRT
 <213> S.epidermidis

<400> 6714
 Met Ala Arg Thr Tyr Asn Val Ile Lys Tyr Val Ile Lys Lys Asn Lys
 1 5 10 15
 Asp Asp Leu Lys Ile His Gly Leu Arg Leu Tyr Glu Phe Asn Ile Lys
 20 25 30
 Asp Glu Lys Ala Ile Asn Ile Ser Gln Pro Ile Phe Val Asn Arg Ala
 35 40 45
 Thr Leu Ile Glu Lys Ile Gln Asn Asp Glu Ala Phe Thr His Ala Phe
 50 55 60
 Arg Val Asn His Asn Thr Tyr Tyr Ala Gly Gln Leu Ile Ser Leu Ser
 65 70 75 80
 Leu Asn Lys Asn Gly Tyr Ile Asn Asn Asn Phe Glu Ala Ser Arg Asp
 85 90 95
 Ile Ile Arg Asn Val Glu Val Ser Ile Leu Asp Tyr Glu
 100 105

<210> 6715
 <211> 99
 <212> PRT
 <213> S.epidermidis

<400> 6715
 Thr Met Arg Thr Tyr Glu Ile Met Tyr Ile Val Arg Pro Asn Ile Glu
 1 5 10 15
 Glu Asp Ala Lys Lys Ala Leu Val Glu Arg Phe Asn Gly Ile Leu Ala
 20 25 30
 Ser Glu Gly Ser Glu Val Leu Glu Glu Lys Asp Trp Gly Lys Arg Arg
 35 40 45
 Leu Ala Tyr Glu Ile Asn Asp Phe Lys Glu Gly Phe Tyr Asn Ile Val
 50 55 60
 Arg Ile Lys Thr Asp Asn Asn Lys Ser Thr Asp Glu Phe Gln Arg Leu
 65 70 75 80
 Ala Lys Ile Asn Asp Asp Ile Ile Arg Tyr Ile Val Ile Arg Glu Asp
 85 90 95
 Gln Asp Lys

<210> 6716
 <211> 71
 <212> PRT
 <213> S.epidermidis

<400> 6716
 Ile Ile Met Thr Ala Asn Val Val Val Ile Thr Met Thr Phe Glu Phe
 1 5 10 15
 Ser Glu Pro Asn Leu Asn Val Arg Gly Asn Ile Met Glu Lys Val Pro
 20 25 30
 Ala Pro Pro Met Ala Thr His Ser Glu Met Asn Thr Ile Leu Lys Leu
 35 40 45
 Cys Val Ile Arg Pro Thr Leu Gly Thr Pro Ala Ser Ile Pro Thr Asn

50 55 60
Ala His Lys Arg Lys Ile Val
65 70

<210> 6717
<211> 147
<212> PRT
<213> S.epidermidis

<400> 6717
Pro Cys Lys Thr Thr Phe Leu Lys Gly Ala Ile Ile Met Ala Lys Ile
1 5 10 15
Thr Val Val Asn Asn Gln Asp Glu Leu Tyr Lys Val Ile Asn Gln Ile
20 25 30
Lys Ser Glu Gly Tyr Leu Glu Thr Glu Leu Ala Val Ile Ser Lys Ser
35 40 45
Lys Leu His Leu Asp Asp Leu His Asn Ser Gln Ile Ser Leu Met Ala
50 55 60
Thr Ser Gly Ser Phe Ser Asp Arg Met Ser Arg Leu Leu Thr Gly Glu
65 70 75 80
Asp Gly Glu Glu Thr Val Leu Ser Arg Tyr Asp Leu Thr Asp Asn Glu
85 90 95
Leu Glu Gly Tyr Lys Gln Asp Ile Leu Asn Asp Lys Met Leu Val Val
100 105 110
Ala Asn Ser Asp Arg Ser Ser His Asp Glu Val Glu Asp Asn Asn Ala
115 120 125
Ala Tyr Lys Glu Val Asp Ile Thr His Tyr Ala Ala Glu Ser Glu Gly
130 135 140
Pro Lys Ala
145

<210> 6718
<211> 464
<212> PRT
<213> S.epidermidis

<400> 6718
Gly Gly Glu Thr Leu Met Asp Phe Asp Thr Ile Thr Ser Ile Ser Thr
1 5 10 15
Pro Met Gly Glu Gly Ala Ile Gly Ile Val Arg Leu Ser Gly Pro Gln
20 25 30
Ala Ile Glu Ile Gly Asp Ile Leu Tyr Lys Gly Lys Lys Lys Leu Ser
35 40 45
Glu Val Glu Thr His Thr Ile Asn Tyr Gly His Ile Ile Asp Pro Glu
50 55 60
Thr Asn Glu Thr Val Glu Glu Val Met Val Ser Val Leu Arg Ala Pro
65 70 75 80
Lys Thr Phe Thr Arg Glu Asp Ile Ile Glu Ile Asn Cys His Gly Gly
85 90 95
Ile Leu Thr Ile Asn Arg Ile Leu Glu Leu Thr Met Thr Tyr Gly Ala
100 105 110
Arg Met Ala Glu Pro Gly Glu Tyr Thr Lys Arg Ala Phe Leu Asn Gly
115 120 125
Arg Ile Asp Leu Ser Gln Ala Glu Ala Val Met Asp Phe Ile Arg Ser
130 135 140
Lys Thr Asp Arg Ala Ser Lys Val Ala Met Asn Gln Ile Glu Gly Arg

[illegible]

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<210> 6719
<211> 147
<212> PRT
<213> S.epidermidis
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<400> 6719																
Glu	Arg	Glu	Thr	Tyr	Met	Lys	Tyr	Asp	Asp	Phe	Ile	Val	Gly	Glu	Thr	
1				5					10					15		
Phe	Lys	Thr	Lys	Ser	Leu	His	Ile	Thr	Glu	Glu	Glu	Ile	Ile	Gln	Phe	
			20					25					30			
Ala	Thr	Thr	Phe	Asp	Pro	Gln	Tyr	Met	His	Ile	Asp	Lys	Glu	Lys	Ala	
			35				40					45				
Glu	Gln	Ser	Arg	Phe	Lys	Gly	Ile	Ile	Ala	Ser	Gly	Met	His	Thr	Leu	
	50					55					60					
Ser	Ile	Ser	Phe	Lys	Leu	Trp	Val	Glu	Glu	Gly	Lys	Tyr	Gly	Glu	Glu	
65					70					75					80	